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Cynllunio ac
Amgylchedd **Cymru**

Planning &
Environment
Decisions **Wales**

Adroddiad

Ymweliad â safle a wnaed ar 21/06/2022
gan Iwan Lloyd BA BTP MRTPI

Arolygydd a benodir gan Weinidogion
Cymru

Dyddiad: 19.08.2022

Report

Site visit made on 21/06/2022

by Iwan Lloyd BA BTP MRTPI

an Inspector appointed by the Welsh
Ministers

Date: 19.08.2022

TOWN AND COUNTRY PLANNING ACT 1990

SECTIONS 62D & 62F

The Developments of National Significance (Wales) Regulations 2016

Application by Brynwell Farm Solar Ltd

Land at Brynwell Farm, on land between the A4232 and Leckwith village

Cyf ffeil/File ref: DNS/3261558

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List of Abbreviations

AHA	Archaeological and Heritage Assessment
ASNW	Ancient Semi-Natural Woodland
CEMP	Construction and Environmental Management Plan
CTMP	Construction Traffic Management Plan
DNS	Development of National Significance
EIA	Ecological Impact Assessment
FCA	Flood Consequences Assessment
FMfP	Flood Map for Planning
GGAT	Glamorgan-Gwent Archaeological Trust
LDP	Local Development Plan
LEMP	Landscape Environment Management Plan
LPA	Local Planning Authority
LVIA	Landscape and Visual Impact Assessment
VoG Council	Vale of Glamorgan Council
NRW	Natural Resources Wales
PPW	Planning Policy Wales, Edition 11
PROW	Public Right of Way
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SEWBRc	South-East Wales Biodiversity Records Centre
SLA	Special Landscape Area
SINC	Sites of Important Nature Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
TAN	Technical Advice Note
TMP	Traffic Management Plan

WG	Welsh Government
ZTV	Zone of Theoretical Visibility

File Ref: DNS/3261558

Site address: Land at Brynwell Farm, on land between the A4232 and Leckwith village

- The application dated 15 March 2021, was made under section 62D of the Town and Country Planning Act 1990 (as amended by the Planning (Wales) Act 2015).
- The applicant is Brynwell Farm Solar Ltd.
- The application was confirmed as valid on 19 May 2021.
- The development is described as the installation of a solar farm comprising ground mounted solar PV panels with a net installed generating capacity (AC) of up to 25 MW, including mounting system, battery storage units, inverters, underground cabling, grid connection hub, stock proof fence, CCTV, internal tracks and associated infrastructure, landscaping, and environmental enhancements, for a temporary period of 40 years.

Secondary Consent Application:

- The secondary application was made under section 62F of the Town and Country Planning Act 1990 (as amended by the Planning (Wales) Act 2015).
- The development proposed is the erection of battery container storage units to support the solar energy hub.

Summary of Recommendation: That planning permission be granted for both applications subject to conditions.

Procedural Matters

1. The Welsh Government has issued a direction on 13 November 2020 that the proposed development is not an environmental impact assessment development within the meaning of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.
2. As a result of representations received in response to the application the applicant was requested to provide further information (Documents A1-A20 September 2021 bundle of additional information). The requested information included material relating to archaeology, heritage assets, ecology, hydrology and flooding, landscape and visual effects, noise, traffic, and construction management. Vale of Glamorgan Council (VoG Council) and Cardiff Council were requested to provide additional information in relation to their Local Impact Reports (LIR), (Documents IP1-IP2). Interested parties, the Councils, and consultees, were given an opportunity to respond to the applicant's additional information, and these are marked as (Documents IP3-IP7).
3. Following those comments (Documents IP3-IP7), the applicant was requested to provide additional information (Documents A21-A34 March 2022 bundle of additional information). This included material on ecology, additional viewpoints, information on passing bays and swept paths of vehicles, and information on flood maps. In response to the March 2022 bundle of additional information, VoG Council, Natural Resources Wales (NRW) and one local resident responded, (Documents IP8-IP10).
4. In addition to the information submitted with the application further details were requested. The application process was suspended where necessary to allow the submission of the requested information and consultation process. All this information and representations have been taken into account in this report.

5. The secondary consent seeks permission for the container units that would be available to house batteries and are shown on the submitted plans as comprising three units. The secondary consent is necessary because the units would constitute a facility that generates electricity from stored energy. It is confirmed that the battery storage units are a separate form of development to the main DNS proposal for the solar farm.
6. I undertook an unaccompanied site visit which included the site and its immediate and wider surroundings, including public rights of way and several more distant vantage points.

The Site and Surroundings

7. The site extends to some 31.8ha (78.7acres) of agricultural land to the north of Michaelston-le-Pit and to the south of Ely, Cardiff and the A4232. Despite its proximity to Cardiff the site is an undulating rural agrarian landscape whereby open fields are bounded by hedgerows and trees and a stream to the west.
8. The site is broadly rectangular in shape and is bounded by agricultural fields to the east and west and the Nant Garw tributary on the western flank of the site. To the south-east corner of the site is Beggan Farm. To the south are agricultural fields a tributary, access track and Brynwell Farm Grade II listed building. To the north is an existing solar farm known as Woden Park Solar Farm, which was the former Ely Brickworks. Woden Park Solar Farm is flanked on its northern boundary with the A4232.
9. In the immediate vicinity of the site there are the properties of Beggan Farm and Brynwell Farm. Brynwell Farm is unoccupied and is boarded-up. Pen-y-Lan is situated to the west of the site separated from it by the wooded feature of Nant Garw stream.
10. There are several public rights of way (PROW) within the surrounding area, but none cross the site. These are broadly to the south of the site and traverse the land north from Meadowvale Farm towards Brynwell Farm and Beggan Farm and then turn east towards Leckwith Woods and Cock Hill. Other PROW are further from the site and continue west from Meadowvale Farm towards Cwrt-yr-Ala and then turn north towards the A4232 underpass and lead to Caerau hill fort Schedule Ancient Monument (SAM). Pylons supporting an electricity line run west to east to the south of the application site between Brynwell and Beggan Farm.
11. The Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site which form a European Marine Site (EMS) is some 5.1km southeast of the site. Cardiff Beech Woods SAC is some 7km north of the site.
12. Cwm Cydfin Site of Special Scientific Interest (SSSI) is some 1.7km to the southeast of the site. There are Sites of Important Nature Conservation (SINCs) near the site. These are Coed y Ddylluan some (0.2km south), Leckwith Woods some (0.3km east) and West Hill Wood some (0.3km east). The woodland adjoining the Nant Garw tributary on the western flank of the site is an Ancient Semi-Natural Woodland (ASNW). Several other ASNWs are within close range of the site.
13. The site falls within the Cwrt-yr-Ala Basin Special Landscape Area (SLA) and within a Mineral Safeguarding Area for limestone.
14. The cabling route for the development travels south of the site along fields and access track leading onto the B4267 Leckwith Road. This crosses the River Ely via Leckwith Bridge, and the cabling connects to an existing substation on Hadfield Road in Cardiff Council administrative area.

Proposed Development

15. The scheme comprises the installation of a solar farm with a 25 MW output. The solar panels will be laid out in rows and mounted on a framework secured by poles driven into the ground together with supporting infrastructure comprising; battery units, inverter cabins, DNO componentry, transformers, grid connection apparatus, stock proof fencing, CCTV, underground cabling, vehicle tracks, access, and landscaping. The proposal includes a temporary laydown area for construction materials and the provision of passing places along Gower Lane. The cabling would be routed along the highway to its point of connection in Hadfield Road in Cardiff.
16. The solar panels would be set on steel framework. The sloping panels would be elevated some 0.8m above the ground at its low point and the highest point would be some 2.8m high. The units will be sited to achieve optimum exposure for solar energy absorption. The solar panels will be static (non-rotating) and the ground underneath could be utilised for grazing, thus generating an additional agricultural yield. Small vertical gaps will be maintained between the panels to prevent an accumulation of surface water run-off so rainwater can drip through and ensure that the hydrological response of the site is unchanged.
17. The battery storage units will allow power to be stored and released to the grid during periods of peak demand and lower power output. For instance, during the winter the peak demand is between 4pm and 7pm and the batteries will be able to release stored power during that period when the panels may have stopped generating power due to darkness. The batteries enable the 'peak and trough' of power output to be flattened off and enable the scheme to provide much more reliable and consistent power to the grid to match periods of high demand. This makes the scheme very efficient and maximises the output from the land.
18. The permission sought is time limited to 40 years after which the scheme would be decommissioned with all the structures and equipment removed and the land would revert to its present undeveloped condition. It was explained that, since the cessation of public subsidy for such schemes, a 40-year lifetime is deemed the minimum necessary to ensure the financial viability of the project.
19. Ecological enhancements of the scheme include planting a 1.2ha wildflower meadow to the south of the site. Gaps in hedgerows across the site will be enhanced with additional native planting. There will be opportunities to reinstate hedgerows and improve habitat connectivity. Retained field margins will be seeded with a species-rich grassland or wildflower mix. Bat and bird boxes will be installed on retained trees within hedgerows and appropriate buffer strips will be incorporated around hedgerows and woodland.

Planning Policy

20. In February 2021 Future Wales became part of the development plan. The Plan acknowledges the impacts of a climate emergency and an ecological emergency and identifies key priorities, risks, and opportunities to achieve the sustainable management of natural resources, including addressing the climate emergency and reversing biodiversity decline.
21. In relation to climate change Future Wales recognises that Wales' potential for solar generation, the Government's support for large-scaled projects and a planning system that provides a strong lead for such development, provides support to the renewable sector to attract new investment and to reduce carbon emissions. It also recognises that the need to reverse biodiversity decline and assist nature recovery is of imperative importance in its own right. Environmental pressures are causing global biodiversity

decline at rates not previously encountered in human history and the rate of species extinction is accelerating.

22. Policy 17, 'Renewable and Low Carbon Energy and Associated Infrastructure', emphasises that 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 and states that decision makers must give significant weight to the need to meet Wales' international commitments and Government's target to generate 70% of consumed electricity by renewable means by 2030 in order to combat the climate emergency.
23. Policy 18 permits Renewable and Low Carbon Energy Developments of National Significance subject to satisfying 11 criteria and the requirements of policy 17. The cumulative impacts of existing and consented renewable energy schemes should also be considered.
24. PPW seeks to protect and enhance landscapes, habitats, biodiversity, geodiversity, and the historic environment in their own right. Among key issues it identifies is the long term and chronic decline of biodiversity and habitat loss.
25. PPW describes the benefits of renewable and low carbon energy, as part of the overall commitment to tackle the climate emergency and increase energy security, as of paramount importance. In this context it explains that the planning system should integrate development with the provision of additional electricity grid network infrastructure, optimise energy storage and maximise renewable and low carbon energy generation. PPW confirms that Future Wales sets out the Welsh Government's policies for the determination of renewable energy schemes of 10MW and more under the Developments of National Significance procedure.
26. PPW is supplemented by Technical Advice Notes (TANs) which provide additional detail on a variety of topics. Of particular relevance to this case are, TAN 5, Nature Conservation and Planning; TAN 11, Noise; TAN 15, Development and Flood Risk; and TAN 24, The Historic Environment.
27. The Environment (Wales) Act 2016 includes a requirement on Welsh Ministers to reduce emissions in Wales by at least 80% by 2050. The Well-being of Future Generations (Wales) Act 2015 is concerned with improving the economic, social, environment and cultural well-being of Wales.
28. Alongside Future Wales, the development plan comprises The Vale of Glamorgan Local Development Plan (LDP) 2011-2026 and the Cardiff LDP 2006-2026 (which only relates to the cabling where it crosses the river Ely to the point of connection to the national grid).
29. The site and surrounding land are situated within a Special Landscape Area as designated in VoG Council's LDP.
30. The most relevant policies of VoG Council LDP are: SP1 – Delivering the Strategy; SP9 – Minerals; SP10 – Built and Natural Environment; MG17 – Special Landscape Areas; MG19 – Sites and Species of European Importance; MG20 – Nationally Protected Sites and Species; MG21 – Sites of Importance for Nature Conservation, Regionally Important Geological and Geomorphological Sites and Priority Habitats and Species; MG22 – Development in Minerals Safeguarding Areas; MG24 – Dormant Mineral Sites; MG30 – Local search areas for solar energy; MD1 - Location of New Development; MD2 - Design of New Development; MD7 - Environmental Protection; MD8 - Historic Environment; MD9 - Promoting Biodiversity, and MD19 - Low Carbon and Renewable Energy Generation.
31. The development plan is supported by supplementary planning guidance (SPG) documents which have been adopted by the Council, of particular relevance are: Biodiversity and Development (2018); Design in the Landscape; Renewable Energy

(2019); Sustainable Development - A Developer's Guide; Trees, Woodlands, Hedgerows and Development (2018) and Michaelston-le-Pit Conservation Area Appraisal and Management Plan.

32. The most relevant policies of Cardiff LDP are: KP15 – Climate Change; EN12 – Renewable Energy and Low Carbon Technologies; EN14 – Flood Risk (as the site falls within a river corridor on the proposals map) and T6 Impact on Transport Networks and Services.

The Case for the Applicant

33. The DNS application was supported by a suite of technical reports. These include an Archaeological and Heritage Assessment, Noise Impact Appraisal, Design and Access Statement, Ecological Impact Assessment and Great Crested Newts Addendum, Flood Consequences Assessment, Landscape and Ecological Management Plan, Outline Construction and Environmental Management Plan, and Landscape and Visual Impact Assessment (LVIA). Other reports assess the scheme's effect on traffic and transport, glint and glare and trees.
34. Following the initial round of representation, the applicant submitted a bundle of additional information in September 2021 and in March 2022.
35. The main points raised by the applicant in support of the application are set out below and are based on the written evidence.

Site Selection and Alternatives

36. The Site Selection Sequential Test (Document A8) indicates that there are no existing, suitable, viable or available alternative sites in the search area which meet the criteria required for a successful solar photovoltaic scheme of this scale.
37. The search area covered a wide geographical area and was refined to take account of brownfield land and constraints, such as agricultural land classification and proximity to grid connection, which is fundamental to the viability of the scheme. The Solar Search Areas identified in VoG Council's LDP Policy MG30 do not provide definitive areas for which solar development must be accommodated and fails to address the critical issue of grid connectivity and land availability. There are no previously developed land sites that could accommodate the proposed development because they are too small, and any potential sites command higher land values associated with alternative uses that would make the scheme unviable.
38. The application site is low quality agricultural land. The proposed development is temporary and reversible, and the proposal would be to allow some continued use of the site for grazing. The proposal must be located close to the point of connection, because as distance from the point of connection increases, the scheme will experience increasing thermal losses and incur increasing costs for trenching and cable runs, eroding its financial viability. The proposed site is in adequate proximity to an available and viable grid connection.
39. Site selection of a site of suitable size to accommodate the proposal with willing landowners is constrained by the availability and proximity of a grid connection. The proposal's viability is also dependant on relatively high solar irradiation, topography, and the orientation of the site's landform.

Environmental Benefits

40. The principle of energy generation from renewable sources is actively supported by International, National, and local policies.

41. The site is large enough to deliver significant environmental benefits in reducing greenhouse gas emissions in the transition to a carbon neutral economy. The 25 MW capacity will generate clean renewable power to over 7,500 homes. Substantial savings in CO₂ of 10,050 tonnes per annum is predicted, making a meaningful contribution to meeting Wales's overall greenhouse gas emission targets. This is a significant benefit that weighs heavily in favour of the proposed development in the planning balance.
42. The Welsh Government has set an ambitious target for Welsh renewables to generate electricity equal to 70% of Wales' consumption by 2030. The target is set out in 'Energy Generation in Wales 2018'. There are significant challenges which must be overcome in order to meet this target. In particular, the absence of any government funding and the lack of adequate grid capacity in many areas of Wales, have placed substantial strain on the viability of renewable energy projects.
43. The Solar Trade Association have advised that the National Renewable Energy Laboratory's tool may be used to provide the expected annual power output of the scheme. The outcome of the assessment shows that the proposed 25 MW capacity would generate a total of 23,418,422 kWh/Year.
44. The proposal will deliver clear biodiversity enhancements, with full details to be agreed with the local planning authority prior to determination of the application and secured through the Landscape and Ecological Management Plan (LEMP). The proposed landscaping and ecological enhancements would be managed and secured for the 40-year duration of the scheme with an ongoing legacy of improved biodiversity thereafter. The site itself will become a haven for wildlife since it will not be disturbed.

Social Benefits

45. Research by the UK Government demonstrates that there is strong public support for renewable energy and that solar energy is the most strongly supported. The research shows that opposition to renewables was very low. Three quarters of respondents to the research indicated that they would be happy to have a large-scale renewable energy development in their area.
46. Wider benefits of the renewable energy scheme include security of energy supply and reduced energy costs for the consumer. The benefits of the proposal include reduced energy bills and security of supply which will reduce Wales's exposure to the volatility of the wholesale energy markets. These are important factors in combating fuel poverty and aim to address the equality issue arising from climate change, which disproportionately affects the most vulnerable communities in Wales as referenced in Future Wales.
47. Local benefits include the diversification of the farming business which will provide a consistent income stream for the landowner and secure the future of the wider farming business. The economic prosperity of rural enterprises is important to support the health and vitality of rural communities.

Economic Benefits

48. The proposal represents a form of agricultural diversification, which brings an economic benefit to the landowner who would receive a consistent ground rent for the full period of installation, enabling them to diversify their income at a time where farm businesses are under considerable strain to remain viable. This will help the landowner to invest in their farm and help their farming enterprise to remain viable during a time of significant change as we leave the European Union, which will bring significant changes to farming subsidy, allied to the more extreme weather conditions we are now facing because of climate change.
49. The proposal will still enable the site to be grazed, retaining its agricultural function, and providing additional agricultural income for the landowners and help to support the local

rural economy. The proposal will generate business rates and spin-off opportunities for wealth creation delivering significant economic benefits to the local and wider economy.

50. The construction and future maintenance of the solar farm will also create employment opportunities. Jobs would be created to fulfil the ongoing land management and ecological enhancements of the scheme. The scheme will support the wider economy by generating employment associated with the planning, construction, operations, and maintenance of the scheme together with increased GVA over its life.
51. The proposal will help generate home grown energy. This will help to protect British consumers from exposure to volatile foreign energy markets and the wholesale cost of energy, and will ensure more control over energy production. The project would be delivered without any government subsidy and would reduce the country's reliance on fossil fuels and the economic exposure to international price fluctuations.

Traffic and Transport

52. The proposed construction traffic route was changed to avoid Leckwith Bridge, now it is intended to route construction traffic over the A4055 bridge and along the B4267 travelling north through Llandough. The formal agreement with VoG Council would be secured through the submission of a final version of the Construction Traffic Management Plan (CTMP) by the imposition of a planning condition.
53. It is not anticipated that there will be a requirement to close lanes along Gower Lane, construction traffic will be compatible with the residential and agricultural traffic, however, if this position changes, any potential lane closures will be agreed with the local authority through its formal process.
54. A revised Transport Statement was submitted with the application which addresses concerns from the Community Council that 16.5m HGVs and 12m rigid trucks can safely enter the site off the B4267 Leckwith Road. The local highway authority has no objection to the proposed construction traffic route and tracking drawings show that the manoeuvre can be achieved. The local authority is satisfied in relation to the integrity of Leckwith Bridge and the provision of passing bays. A banksman will be employed to provide added assurance that manoeuvres can be made safely.
55. The number of deliveries (some 241 in one movement) would be spread over 6 weeks, resulting in a maximum of around eight large vehicle one-way movement per day accessing the site. Before the lane narrows more significantly there would be a laydown area in which materials would be decanted to smaller vehicles prior to delivery at the site. The local authority does not object to the proposed construction traffic arrangements.
56. The level of traffic during the construction phase is not considered to be material and it is considered that this will not have an impact on the safety or operation of the local highway network. Thereafter there would be minimal traffic attached to the site during its operational stage.

Cultural Heritage

57. The Archaeological and Heritage Assessment (AHA) identifies that the site does not contain any heritage assets. The AHA does not identify any effect on historic assets arising from adverse changes to their setting. The AHA addendum (Document A4) was submitted to justify the 1km radius study area through ZTVs. This provided the justification for scoping-out historic assets within and outside the 1km radius study area.
58. In relation to buried archaeology the baseline data indicate the presence of medieval occupation and points to the potential for the site to contain archaeological remains, but documentary evidence for an accompanying settlement and church is ambiguous. The extent of any potential archaeological remains may have suffered some degree of

damage to its upper levels by historic and modern ploughing. The AHA conclusion is that the effects upon archaeology will not be significant, and the issue of potential archaeology can be appropriately addressed through field work, as opposed to preservation in situ. This matter can be addressed by a planning condition.

59. Within the 1km study area of the AHA the report assessed three scheduled monuments, Leckwith Bridge (also a Grade II listed building), Caerau Camp and Ely Roman Villa. These were revaluated in the addendum AHA. The AHA concluded that the proposed development would not be visible from the Ely Roman Villa SAM, and this was supported by the ZTVs. The addendum AHA reaffirms the conclusion in the AHA that the development within the site would have no effect upon the significance of the SAM.
60. The Caerau Camp SAM Iron Age Hillfort and the Grade II listed building Church of St Mary located some 600m to the west of the site do have some partial views of the site in combination with Woden Park Solar Farm. The view is filtered by trees and hedgerows and the proposed development would not be prominent and only partially visible. However, the AHA and addendum AHA identifies that the topographic location of the SAM is the most relevant feature of its significance rather than the character and appearance of the adjacent landscape. The SAMs setting is highly developed by housing to the north and road to the east. To the south and east is woodland and farmland which is unrelated historically to the monument and its archaeology. The AHA addendum finds that the introduction of a further, slightly visible modern element into this landscape would have no influence on the monument's significance. It is concluded that the proposed development, whilst resulting in a very minor change to the monument's wider setting, would not result in any adverse effect on its significance. The proposal would not result in change to the listed Church's setting and would have no effect on its significance.
61. Leckwith Bridge SAM and Grade II* listed building is situated within the 1km study area to the east of the site. Leckwith Bridge is a medieval bridge and stands alongside a replacement 20th Century bridge. The cabling route run forms part of the proposal and runs from the site along the access road and main highway. The cable will be installed within the existing roadway of the 20th-century bridge and would not be visible. It is concluded in the AHA that there would be no change to the setting of the asset and no negative effects upon its significance.
62. Brynwell Farm a Grade II listed building is situated some 130m to the south of the site. The AHA notes that the building derives its significance from its evidential value of architectural and historic interest. Brynwell Farm would have been built to oversee and manage the agricultural lands associated with it. The asset's immediate setting is defined by the ringwork and outbuildings, with its wider setting taking in other nearby settlements and the rural landscape. The main frontage of the farmhouse faces towards Beggan Farm, but oblique views in the direction of the site exist. There would evidently be a change in the view from the asset towards the north, although modern infrastructure is already present in the form of telegraph poles and electricity pylons.
63. Development will therefore result in a change in the setting of the asset but only visible in a small arc of the view to the north only (approximately 90 degrees from northwest to northeast). The agricultural association would still be strongly appreciable through the remaining 270 degrees. It is noted that the panels are in any case likely to be screened and filtered in views by hedgerows and other vegetation in the vicinity of the farm. The AHA notes that whilst there is a change in setting in part of the arc of view from the farm, the contribution made by the setting overall is not considered to be so changed as to reduce the contribution to significance made by that setting. The ability to appreciate or understand the asset would not be affected by the proposed development. The overall effect upon the significance of the Farm is therefore considered to be materially unaltered;

that it can still be understood in relation to agricultural surroundings, its topographic position is unchanged, and its architectural and historic interests are unharmed.

64. The nearest conservation area is Michaelston-le-Pit which lies some 1.5km to the south of the site. The conservation area also includes 4 listed buildings, but the conservation area and listed assets are outside the ZTV and were scoped out of the assessment, due to topography, lack of visibility, screening, and lack of historical or functional association to the site. The AHA addendum concludes that the conservation area and listed buildings' setting would not be affected by the proposed development.
65. The Registered Park and Garden Cwrt-yr-Ala (Grade II) marginally extends into the southern part of the 1km study area, but most of the grounds and the mansion lie outside the study area of the AHA. The ZTVs contained in the AHA addendum suggests that partial views may be possible to the site from the southern, former parkland areas. Viewpoints taken from the asset do not indicate any visibility to the site due to woodland on the opposite side of the valley and hills beyond. If there were a view of the site as the ZTV suggests, the presence of part of the proposed development in the distance would have little influence on the asset's historic designed views and thus on its significance. The experience of the asset from the house and its gardens across the valley and from within the valley adjacent to the brook, would be unaffected. Given this factor and the likelihood that the view to the development would be at most very slight and not prominent, it is assessed that the development of the site would not result in any adverse effect on the significance of Cwrt-yr-Ala Historic Park and Garden.
66. The AHA addendum notes that very distant views to a small part of the development may be possible from the eastern edge of the Grade II* Historic Park and Garden at Coedarhydyglyn. However, the asset is some 3.8km to the west and the view would only be from its eastern edge, from an area occupied by a caravan park, and at least filtered by an adjacent hedgerow. There would be no view from the central areas which include the Grade I listed house and core parkland, and which contain most of its heritage significance. As such, a distant and limited view of a small part of the site from this location would have no implication for the asset's significance.

Landscape and Visual Effects

67. The LVIA accompanied the application included plans and representative viewpoints of the proposed development. A supplementary LVIA addendum (Document A3) was provided in the September 2021 bundle of information. This provided further ZTVs, 13 viewpoints and 5 accurate visual representation viewpoints (AVR) (Documents A9-A13). In the March 2022 bundle an additional AVR and viewpoint was provided (Documents A22-A23) and further commentary on the SLA and hedgerow management (Document A21).
68. The LVIA describes the site as an elevated plateau which sits above the surrounding landscape. It comprises field enclosures, all surrounded by native species hedges. The perimeter of the site contains many large trees and there are woodland belts along the south-west sector of the site, along the southern boundary, and running north through the middle of the site. The immediate area is isolated both physically and visually from its surroundings. It contains just a few isolated buildings and two footpaths with potential views towards the site. The ridgelines to the west, north-east and east are covered with woodland.
69. The overall conclusion of the LVIA having assessed the landscape and visual impact of the proposed development notes that this is a good site for solar energy production. Although located within the Cwrt-yr-Ala Basin SLA, views into the site are hard to find from many directions, including those theoretically revealed through the ZTV modelling.

The presence of the existing neighbouring solar farm is not assessed as significantly increasing any cumulative assessed adverse effects.

70. The LVIA describes the LANDMAP evaluation as high for landscape habitat and visual and sensory features of the area. The site lies within the National Landscape Character Area 36: Bro Morgannwg/Vale of Glamorgan. The summary description notes that the Vale is a distinctive, gentle lowland landscape, largely comprising a rolling limestone plateau. Glacial till contributes to its undulating topography. A variety of rural land uses characterise the area, reinforced by thick hedgerows, frequent small woodlands, and trees, which create a sense of enclosure and intimacy.
71. The site lies at the extreme eastern boundary of the character area which is defined at a local level as Landscape Character Area Cwrt yr Ala Valley. This is described as a rolling and undulating area focussed on Cwrt yr Ala valley forming the headwaters of the Cadoxton valley. The highest point is a Cock Hill to the north. The landcover is a mosaic of pastoral fields, with hedgerows often containing trees, plus woodlands. The area is very tranquil, as no major roads run through it. The area has a strong sense of place where vernacular buildings, broadleaf woodland and well treed hedgerows complement well managed farmland.
72. VoG Council's LDP background document 'Designation of Special Landscape Areas' (2013 updated) document provides a description of the primary landscape qualities and features of the Landscape Character Area of Cwrt-yr-Ala. These include, amongst others, streams, dammed-ponds, wooded valley sides, pleasant settlement in the valley bottom, enclosed topography in association with woodland creates a sense of enclosure, and the steep sided valleys dominate the character of the landscape and habitats.
73. The LVIA concludes that the site has a moderate sensitivity to solar energy production and there are no significant adverse effects upon landscape character. The proposal provides an opportunity to improve the described landscape character, in the medium and long-term, through changing landscape management regimes which will increase biodiversity as well as enhancing hedgerow cover and wildflower planting in this relatively low-intensively farmed landscape.
74. The site has a hidden quality and is well-screened from the surrounding area, minimising potential effects upon landscape character. There are no proposed changes to defined field boundary patterns or hedgerows. The effect of the proposal upon landscape character may slightly alter the perception of rural pasture through a change from grassland to solar panels. This could increase the perception of human influence on the landscape. However, the lack of public access, footpaths, and any significant visual connection to and from the site means that any effect will be highly localised and will exhibit negligible influence upon the surrounding area. There would be no changes to hedgerows or trees, including the perimeter woodland areas and the woodland at the southern end of the site.
75. At a site-specific level there will be changes from grassland to solar PV panels but, because of the highly localised nature of any effects, this is assessed as not adverse. The high value and good condition of the landscape will be protected by the retention of all boundary elements. The vegetated nature of the area will be maintained. The appearance of the field enclosures will change, but in all other respects the rural quality will remain unchanged. This includes the strong visual framework of hedgerows and trees, the field pattern, and the sense of tranquillity, shelter and enclosure, and safety. In response to the request for further information in the March 2022 bundle (Document A21) the applicant re-affirms the view that the distinctive field patterns, boundary hedgerows and woodland of the site would be preserved, managed, and enhanced by the development in accordance with the key characteristics of the SLA.

76. The almost complete screening afforded by the site and field boundaries mean that any changes to perception will only be possible within the site itself which has no public access. It is therefore assessed that the proposal would not constitute an inharmonious addition to the landscape which can be perceived by the public.
77. In conclusion, the significance of the effect upon landscape character is assessed as slight. This is principally due to the very low levels of perception from the surrounding area.
78. The visual impact of the scheme has been informed by mapping the ZTV of the scheme in isolation and in combination with Woden Park Solar Farm. In practice the visibility would be more limited because of the screening effects of landscape features, particularly vegetation. The viewpoints and 6 AVRs chosen for the photomontages provide a visual representation of the scheme from a variety of vantage points. Amongst these AVRs, visualisation VP5 (Document A22) and viewpoint photograph 9 (Document A23) were added to the assessment. It is noted that the site at VP5 is slightly more visible than the LVIA assessed view at VP4 (noted as slight or moderate and slightly adverse in winter views). The view at VP5 is considered to be further away and the site is viewed at a perpendicular angle to the footpath unlike VP4.
79. The effect upon visual receptors is assessed as moderate, through slight to negligible. No assessments of very large, large, or moderate were recorded. The removal of solar panels from the southern end of the southernmost fields, have reduced previously moderate effects upon a viewpoint at Beggan Farm to slight and not adverse. The view will now be towards a wildflower meadow and not solar panels. From Pen-y-Lan Farm the site will be visible and it is recommended that the existing gappy-hedge is allowed to grow to mitigate against an assessed slightly adverse effect.
80. Seven views were assessed as receiving a slight and slightly adverse visual effect. Two are from residential properties and the remainder from short sections of footpath. From these viewpoints any adverse effects upon views can be mitigated, but not screened completely until around 7-10 years post-planting.
81. Up to around 7 years the residual effect will remain slightly adverse. Once mitigation planting has established, the residual effect is likely to be not adverse. The applicant in agreement with VoG Council would manage the site's hedgerows at 3m in height with the inclusion of some larger species and by also allowing some hedgerow trees to mature to reflect the existing character of boundaries in the area. This aspect, amongst other mitigation measures would be controlled by condition through the final submission of the LEMP.
82. The LVIA notes that all visual effects relate to the land cover within the field enclosures themselves, rather than any changes to landscape pattern or wider views which will remain unchanged. It is principally a visual change from one material (agricultural crops) to another (solar arrays), but with a potential change to perceptions of the landscape view based upon an individual's response to this type of landscape change.

Ecology and Nature Conservation

83. A full suite of ecology surveys is submitted as detailed in an Ecological Impact Assessment (EIA) in March 2021, an EIA addendum updated in March 2022 (Document A22) accompanied by a Great Crested Newt addendum report.
84. The EIAs assessed the impact of the development on designated sites in the area and protected species, together with avoidance and mitigation measures and biodiversity enhancement
85. The proposed solar farm sits within the existing field margins of the site and will allow appropriate buffer zones to woodland and hedgerow margins. Gaps in hedgerows across

the site will be enhanced with additional native planting and will be allowed to mature through long-term management proposal to be finalised through the LEMP condition.

86. Mitigation measures to be secured by planning condition would ensure that there would be no effect on the favourable conservation status of protected species, and the requirement for a European Protected Species (EPS) licence in the case of any direct effects provides additional protection.
87. During the construction phase, a strategy for the installation of the panels and associated infrastructure would ensure minimal disruption to ecology which would be set out in a CEMP.
88. The suite of EIAs have concluded that the low ecological value of the affected area in combination with the proposed ecological enhancements, such as the creation of planted biodiversity areas and species rich grassland areas, means that the scheme has potential to have a net benefit to biodiversity during the operational phase.
89. The proposals would be fully reversible and temporary for a period of 40 years. The land could be quickly restored to its former use. There would therefore be no long-term harmful impacts from the development.
90. If permitted the scheme would cause no unacceptable impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), or protected habitats and species.

Flood Risk and Hydrology

91. A detailed Flood Consequences Assessment (FCA) and updated flood risk assessment has identified that the entirety of the panelled area of the site is within DAM zone A and FMfP Flood Zone 1. The FCA concluded that the application of a justification test was not deemed necessary. However, the updated FCA considered the justification test in relation to the cabling route over Leckwith Bridge, but the site itself was of low risk of flooding.
92. The FCA in relation to ground hydrology of the site was not considered to increase flood risk within the catchment through a loss of floodplain storage or impedance of overland flow routes.
93. With regards to the installation of the solar panels, which make up the bulk of the proposed development, these would be individually spaced on grass cover to allow thermal expansion which would provide gaps that would facilitate the dispersal of rainwater. Battery containers and other apparatus would lie on permeable surfaces to avoid accelerating surface water run-off. Therefore, the scheme is considered to be in accordance with PPW and VoG Council's LDP policy MD7.
94. The cable would be routed across Leckwith Bridge and zones C1, C2 and B, but also the existing flood defended zone of TAN 15. The FCA notes that the cabling will be routed within the existing highway infrastructure alongside existing utilities and would not cause any increase in flood risk elsewhere. NRW confirm that the latest FMfP do not differ from the DAM to any significant degree and that the proposal is acceptable in relation to flooding.

Glint and Glare

95. The Glint and Glare assessment submitted with the application analysed the effects of glint and glare and their impact on local receptors in detail and did not conclude any significant impacts on nearby residential properties or users of nearby roads or PROWs.
96. No lighting is to be installed during the operational period. This can be controlled through planning condition in the interests of visual amenity and biodiversity interests.

97. A review of the available imagery shows that screening in the form of intervening terrain, existing vegetation, and buildings will obstruct views of the reflecting panels for observers located in the surrounding dwellings. Overall, no impacts upon observers located at the surrounding dwellings are predicted.
98. Cardiff Airport is over 10 km from the proposed development, the orientation of the runway is such that the proposed development is almost perpendicular to approaching pilots on either runway. Overall, no significant impact on aviation activity associated with Cardiff Airport is expected and no detailed assessment is recommended.

Noise

99. An assessment of noise has demonstrated photovoltaic panels are inert and would emit no noise, dust or vibration. The battery units would generate a low-level noise resulting from supplementary cooling fans and the transmission of the power to the grid. However, their location would be far enough away from residential properties. Measures would be incorporated to minimise noise during the construction phase which would be secured via the CEMP condition and specific noise condition.

Agricultural Land Quality and Tree Survey

100. An assessment of agricultural land quality has indicated that the site was comprised of grades 3b, 4 and 5 agricultural land. This data was supplemented by additional information obtained through engagement with Welsh Government's Land, Nature, and Forestry Division. In the light of the above, the Agricultural Land Use & Soil Policy Advisor for the Welsh Government determined that an Agricultural Land Classification survey was not required.

Planning Policy

101. The Planning, Design and Access Statement and the September 2021 response by the applicant (Document A2) demonstrates that the scheme performs well against the objectives and policies of the LDP and the SPG documents. Future Wales and PPW makes clear the support for large-scale renewable projects

Sustainability and Well-being

102. The scheme performs well against the placemaking aims of PPW and the goals of the Well-being and Future Generations Act.

Conditions

103. The applicant has confirmed general agreement with the suite of conditions suggested by the Council. These have subsequently been refined and a revised list has been agreed with the Council.
104. The conditions identify a range of matters that would require the Council's agreement before development can commence. Responsibility for the submission of such details would fall on the developer. Compliance with such conditions, including those that would restrict the timing of certain works, would require careful timetabling of the project, influencing when the scheme might become operational.

Conclusions

105. The scheme would be delivered without any government subsidy and would reduce the country's reliance on fossil fuels and the economic exposure to international price fluctuations.
106. The proposed development is sustainable in terms of the environmental, economic, and social strands of sustainability set out in PPW. The numerous gains that would arise in this respect can be secured without giving rise to any unacceptable harm.

107. The site selection process has been robust, and the site location is justified on the basis of the key factors which make it suitable for this form of development. Impacts of the scheme have been carefully mitigated through measures and ecological enhancements to the site and will ensure the development achieves an overall net gain in biodiversity.
108. It is considered that the proposed scheme would accord with main objectives of national policy and that the development would provide a substantial contribution to increasing renewable energy generation and reducing greenhouse gas emissions.

The Case for the Local Planning Authorities

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Landscape and Visual Impact

109. The application is supported by a LVIA which provides an assessment of the likely visual impacts of the proposed solar farm. In conclusion, the LVIA considers 'the site has a moderate sensitivity to solar energy production, and there are no significantly adverse effects upon landscape character'. The LVIA considers that the proposal provides an opportunity to improve the described landscape character in the medium to long term and that slight adverse effects from suggested viewpoints could be mitigated by suggested measures including retention of existing boundary features
110. The LVIA should provide a wider ZTV to indicate or exclude potential for longer distance views noting the elevated position of the proposed array particularly in relation to land to the south and to include potentially sensitive longer range receptor sites, including those adjacent to areas of greater populous. The viewpoints utilised are generally from the most publicly accessible locations from which the proposed solar array would be visible.
111. The LVIA indicates that the species-rich hedgerow and boundary enclosures would be maintained to protect the high value and good condition of the landscape and recommends that the existing hedgerows and trees are allowed to grow to reduce any residual effect. Noting that the submitted LVIA places great emphasis on the suggested screening benefits of hedgerow planting to minimise landscape impacts or the impacts of glint and glare, this should be clarified for the avoidance of doubt.
112. On the basis of the available information, the local planning authority (LPA) would generally agree with the assessment that the site has moderate sensitivity to solar farm development and is generally well enclosed by surrounding woodland and established field enclosures, including those to the site that are indicated to be retained and could be a suitable site for solar energy production.
113. Noting all the above, it is considered that the proposals could have a negative impact upon the local landscape of a minor to moderate degree, the extent of which would be better informed with further information as detailed above. Any such impact would however need to be balanced against the permanence of the development, its potential reversibility, and the policy support for provision for renewable energy.
114. The following information was requested by VoG Council to the applicant's September 2021 bundle of information. VoG Council sought clarification that in relation to passing bays no hedgerow would need to be removed and sought clarification over the extent of hedgerow removal needed to create visibility splays, and the implications of such works on ecological and visual impact. VoG Council sought an additional AVR (VP5) be provided and (VP9) to be re-taken from the PROW, and that the applicant addresses the impact of the proposal on the special characteristics of the SLA.
115. VoG Council's response to the applicant's March 2022 bundle of information notes that AVR (VP5) shows the character change in the landscape, with the solar farm offering a significant encroachment into the character of the area. Whilst it is noted that there is no

impact in the distinctive irregular field pattern, the statement that the impact will be restricted to the site is misleading as there will be a wider localised impact on the perception of the area by people utilising the public footpath network.

Agricultural Land Classification

116. The site of the array itself comprises Grade 3b, Grade 4 and Grade 5 agricultural land. Council records indicate the site is predominantly moderate quality agricultural land (3b). However, part of the south-eastern leg of the proposed development site falls within an area identified as grade 3a agricultural land, although it is unlikely this type of development would sterilise the land for agricultural purposes.
117. Notwithstanding this and the suggested reversibility and limited timescale for the development, the proposal would not result in the permanent loss of this land, and as such the proposal would have a neutral impact in this regard.

Access and Highways

118. It is agreed that once operational the level of traffic associated with the development would not have a material impact on the wider highway network. However, as noted above, whilst some of these matters could be further clarified by planning condition, it is considered that further detail should be provided prior to determination of the application. Without this further clarification, it is considered that there is a potential the proposal would have a negative impact upon local and wider highway safety (and associated impacts) because of the proposal, particularly during the construction phase.

Ecology

119. The proposed development site does not include any known ecological designations, however, due to its scale it has potential to impact upon adjoining designations and represents an opportunity to enhance the ecological value of the site by improving connections between existing habitats particularly those that have been designated due to their ecological importance.
120. Trees and hedgerows within the site are generally to be retained and enhancement is proposed which is welcomed. With regard to the EIA, the suggested mitigation for any loss of hedgerows is in line with the Biodiversity and Development SPG for the Vale of Glamorgan.
121. The strengthening of existing poor condition or species poor hedges does not contribute to the mitigation which is based on hedge length. Furthermore, there are a number of discrepancies within the submissions with regard to the nature of the management of the hedgerows within the landscape and visual impact section, including suggesting annual cutting/flailing, 3-year rotation, and then being left to establish.
122. Further detail is required with regard to bird and bat species which are mentioned within the EIA. This should include detail of category red species including Skylark and Yellowhammer. Such a survey would better inform the suggested mitigation for birds and whether nest boxes proposed would be sufficient. The EIA also fails to provide reference to fungi records.
123. There is no allowance made in the LEMP for future population monitoring to measure the success of the overall scheme in contributing to the biodiversity of this part of the Vale of Glamorgan. In order to produce a more informed and iterative LEMP more survey work is needed so that it reflects properly the need to mitigate and enhance biodiversity as required by national and local policy. The current LEMP is very amenity orientated rather than contributing to biodiversity.

124. Based on the scale of the proposal, an approach focused on green infrastructure principles should be pursued to ensure the development enhances biodiversity on the site and within the wider area.
125. With regard to Great Crested Newts only one pond at 220m from the development was regarded as having any potential but no access was secured for DNA testing. The nearest pond returned a negative for DNA. Although the consultants regard the use of the site as being unlikely, the Council's Ecologist considers that it could be beneficial to erect herptile fencing on the western boundary during the construction phase, especially noting the position of Nant Garw.
126. The plans accompanying the submitted Transport Statement, shows the provision of an enlarged and splayed access, in addition to provision of 43 metre visibility splays in both directions. This part of the lane is currently enclosed by an established hedgerow that would appear to be proposed for removal although an assessment of this hedgerow or the habitat it provides has not been provided in the submitted EIA or LVIA. Noting the above, it is considered that the proposal has the potential to have a negative impact upon biodiversity. This may be offset by suggested mitigation to some degree.
127. Further to the applicant's September 2021 bundle of additional information, the following information was requested by VoG Council's Ecologist. Clarification of inconsistencies in documents as to whether it is the intention to remove circa. 80 metres of hedgerow to create visibility splays and consideration should be given to employ a banksman. Consider the Council's concerns regarding the biodiversity of the hedgerow given that the area is important for Hazel Dormouse. Clarification as to whether the hedge would be reinstated upon completion and would the species mix mirror that of the hedgerow removed. Consider the Council's concerns about the lack of assessment of the impact of laydown areas and in addition the lack of details in terms of ground reinforcement and reinstatement after use. VoG Council sought a revised LEMP to cover matters involving breeding birds and fungi.

Historic Environment

128. Whilst there are no designated historic assets within the site area, there are a number of heritage assets within the locality of the proposal. The proposal is supported by an LVIA and an AHA.
129. The archaeological records show potential remains of Beggan (Beganstone) Church that appears in the Valuation of Norwich (1254). The records state the remains are "probably connected with Beganstone DMV west of Leckwith, whose approximate NGR it has been given; but Began DMV (St Mellons) at ST23158330 is also a possibility." It is noted that Glamorgan-Gwent Archaeological Trust (GGAT) have been consulted under separate cover and the LPA would revert to their comments with regard to associated impacts. Due to the scale of the proposal, it is considered it would be likely to have an impact upon surrounding designations which are within close proximity to the site.
130. The supporting AHA has identified a study area of 1 kilometre around the application site. It is not clear why the study area of this size was identified. Whilst it is possible that any additional historic assets would be 'scoped out' of any detailed assessments it is not clear that they have been adequately considered. To this end both the AHA and LVIA are inadequate in providing necessary information to make an appropriately informed decision. Within 3km there are 6 historic assets within the respective buffer zone within 5km there are 11 historic assets.
131. The AHA identifies Brynwell Farm as the historic asset that would most likely be affected. This is the nearest listed building a grade II listed building. The LVIA and AHA are considered inadequate in terms of providing the necessary information for the decision maker to make an appropriately informed decision given the scale of the development.

As such there is insufficient information to demonstrate the proposal would not have a negative impact to comply with the requirements of LDP policy including Policy MD8.

Other Matters

Living conditions

132. Even in the absence of noise mitigation, the Noise Impact Assessment states that predicted associated noise impact would be 'low to negligible'. It is considered that the proposed development would likely have a neutral impact upon living conditions of occupiers of neighbouring residential properties during the operational phase, although could potentially have a minor negative impact during construction.

Social, Environmental and Economic Effects

133. There is the potential for positive social and economic effects at the local level which would accord with the objectives of the LDP including the aim of delivering sustainable development. In this regard the proposals are considered to have a positive impact.

Water & Drainage

134. This site of the proposed array is not located within a Development Advice Map (DAM) zone at risk of tidal or fluvial flooding. NRW flood maps indicate the majority of the site to be of low risk of surface water flooding.
135. A high risk of surface water flooding is indicated to exist within the central valley of the site and along the southern and western boundary. Information submitted to support this application suggests surface water run-off generated by the proposed photovoltaic panels will be permitted to drain freely to the permeable ground beneath.
136. Further consideration must be given to the expected increase in run-off volumes generated during both construction and operational phases and how any impact downstream of the site can be minimised. No infiltration testing has been submitted in support of this application and will be required to demonstrate the ground ability to infiltrate water.

Mineral Resource

137. It is not considered that the proposal would result in any significant conflict with LDP policies MG22 and MG24 and therefore would have a neutral impact in terms of mineral resource.

Leckwith bridge

138. In addition to the concerns raised above, VOG Committee Members also noted these following matters. The need to consider phasing of development with the proposals at Leckwith Quays hybrid planning application for residential development for up to 250 dwellings. Associated highway and bridge improvement/realignment works involves the demolition of all buildings on site and the existing B4267 Leckwith Road Bridge.

Secondary consent

139. Owing to the suggested scale, setback, and suggested screening, individually the battery storage area could have a neutral to minor negative impact upon the wider landscape setting. The secondary consent for the battery storage unit would likely result in neutral to minor negative impacts in this regards, given reduced comparable impacts with the overall solar farm proposed. These would include limited highways movements dedicated to the installation of the battery storage facility; smaller scale and lower visual prominence of battery storage facility when viewed from historic assets; and reduced land take and associated ecological impact.

140. As such when considered cumulatively the secondary consent could result in potential negative impacts with regard to landscape and visual impact, highways, ecology and the historic environment subject to the further clarification detailed within the principal LIR.
141. Solar farms generally do not create large amounts of noise; however, a scheme of this scale has the potential to create higher levels of noise particularly in relation to the proposed battery storage. The Noise Impact Assessment states that predicted associated noise impact would be 'low to negligible'.

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142. Aside from the minimal disruption that would occur during cable trenching works, no impacts are anticipated as a result of the development. The development is therefore considered to have a neutral impact.
143. Given that the proposed works within Cardiff Council's administrative area are limited to trenching cabling under the existing highway network and connecting to the grid at the substation on Hadfield Road, no conditions are necessary. The development is considered to have a neutral impact on Cardiff Council's administrative area.

Consultation Replies

Most of the representations summarised below were submitted prior to the presentation of additional information by the applicant. Further rounds of consultation were undertaken in response to the applicant's submissions of further information and subsequent rounds of consultation responses are summarised below.

Dwr Cymru

144. The application does not propose to connect to the public sewer, and therefore Dwr Cymru/Welsh Water have no further comments.

Welsh Government – Transport

145. The site is accessed off the Cardiff's A4232 section. Any Abnormal Indivisible Loads to travel on the network should be supported by an identified route with travelling dimensions and weights. This does not preclude the statutory notifications which would also be required to take place for any Abnormal Indivisible Loads. There are no objection or other comments to make.

Health and Safety

146. Health and Safety Executive do not intend to make a representation for this DNS.

Natural Resources Wales

147. NRW's final response identified two requirements. The first condition asked for submission and approval of a final LEMP; and measures to avoid and/or minimise risk of harm to protected species during site clearance and construction activities. The second condition asked for submission and approval of a full and final CEMP; and full details of the long-term management of hedgerows for the period of operation. With regards to the LEMP, NRW welcome the details provided in the latest report which state that "no trees or hedgerow are proposed for removal as part of the proposal" and the clarification provided regarding a maintenance regime for hedgerows.
148. To ensure appropriate management for dormice NRW recommended that the LEMP, includes the following bullet points: a schedule of management activities, that takes account of good practice working periods a review of the management activities within the LEMP every five years for the period of operation, informed by monitoring of condition of habitats.

149. NRW are satisfied with the Great Crested Newts survey and conclusions. Based on this new information, NRW have no remaining concerns regarding great crested newts. The EIA contains recommendations for the maintenance and enhancement for protected species.
150. NRW note that the revised transport scheme states that some hedgerows along the proposed access route may need to be removed to allow temporary passing places. This could impact upon the SSSI if this leads to a reduction in the connectivity of the site. It appears that the areas to be cleared are relatively small and are in areas where the hedgerow and tree cover is wide enough to maintain connectivity despite clearance works.
151. The Cwm Cydfin SSSI is approximately 1.7km from the proposed development site and benefits from the buffer provided by the wider Leckwith woods and areas of woodland and hedgerows across Michaelston-le-pit and Dinas Powys. NRW note that the EIA has not been updated to reflect the potential impacts on Cwm Cydfin SSSI. However, NRW are satisfied that the measures proposed will prevent any significant impacts to Cwm Cydfin SSSI.
152. NRW has no objection subject to a LEMP and CEMP. The details of which, should include the methods for vegetation clearance for the laydown areas, passing bays and the main site. It also recommends that precautionary methods are undertaken as outlined in the Revised EIA for the laydown areas to avoid impacts on dormice.

Michaelston-le-Pit & Leckwith Community Councils

153. The Community Council is in favour of switching future sources of energy from fossil fuels to "green technologies" but there are concerns regarding what is being proposed for the Brynwell site.
154. Within the LEMP some areas of the site are described as 'marshy grassland'. Water from the site drains into the Nant Garw stream. According to the NRW Flood Risk Map, the area around the Nant Garw is at 'High Risk of flooding from surface water and small watercourses'. 'Surface water and small watercourse flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground'. The desktop analysis does not appear to have taken into account the ground temperature, or the ground heat temperature being permanently altered, potentially affecting the thermal and evaporation dynamics of this significant land mass where downstream natural water drainage would be affected.
155. The effect of the run-off of water from such a large area covered in solar panels would add to the well documented negative effects on potential flooding within the River Cadoxton's area. This is a major issue for residents within Dinas Powys whose properties were recently damaged by flooding and is the subject of concern for NRW.
156. Brynwellsolar.com which holds all of the relevant planning documentation, states that the project would allow the local farming family to diversify their income stream via a 40-year lease of the land. The Community Council is supportive of the family in these aims. There are concerns regarding de-commissioning of harmful and dangerous batteries.
157. The proposed installation of solar panels over such an extensive area would have an adverse visual impact on the surrounding landscape. The installation would be seen from a distance including established footpaths – Gower Lane, especially between Brynwell Farm to Beggan Farm and nearby roads. The grade II listed Brynwell Farmhouse and farm buildings are adjacent to the proposed solar development. The Council disagrees with the contention that "the change being only visible in approximately 90 degrees of the view of the farm". In fact, the main, traditional, entrance to the farm faces the proposed

development and the 14th century lancet window also has a northern aspect, overlooking the proposed development.

158. There are concerns regarding the effect of the noise from the battery storage unit on the quality of life of the residents of Beggan Farm. The location of the unit is far too close to the farm's main building. The unit's location would need to be changed and greater efforts made to keep the noise levels as low as possible.
159. Access to the site, the proposed access route via Gower Lane, would not be suitable for heavy vehicles or for the volume of traffic. Gower Lane is also a public footpath. The lane is very narrow with no passing places. In addition to vehicles accessing the site for construction there would be an ongoing need for maintenance. The claim that 16.5m HGVs and 12m rigid trucks can safely enter the site off the B4267 Leckwith Road is disputed. This manoeuvre onto Leckwith Green is simply not possible.
160. The removal of ancient hedgerows to improve passing bays is against the law as set out in, The 1997 Hedgerow Regulations (Statutory Instruments No 1160).

Cadw

161. Cadw has no objection to the above proposal based on the information received. The application is accompanied by an archaeological and heritage assessment prepared by EDP. This has considered the impact of the proposed development on the historic environment, including the settings of designated historic assets. This report has concluded that the proposed development will have no impact on the settings of any designated historic asset. Cadw concur with this conclusion.
162. Additional information including an amended archaeological and heritage assessment prepared by EDP have been submitted in support of the above application. This addendum has justified the 1km study area and revised the assessment in relation to scheduled monument Caerau Camp and the Grade II Historic Park and Garden Cwrt-yr-Ala. The study concluded that the proposed development would not result in any adverse effect on any historic assets. Cadw concur with this conclusion.

Glamorgan-Gwent Archaeological Planning

163. The Archaeological and Heritage Assessment meets current professional standards. The report details the known historic assets within the proposed development area, and those external to the proposed development area but within the wider study area and therefore upon which the development may have a visual impact, on the assets or their setting.
164. The assessment concludes that there is the potential for encountering archaeological remains, particularly those dating to the medieval period, due to the presence of Beganstone Church and Brynwell to the south of the area. The Government advice is that archaeological deposits should remain preserved in situ, and if the need for the development is considered to outweigh the importance of the archaeological resource, then the requirement will be preservation by record. GGAT therefore recommend that a condition requiring the applicant to submit and implement a detailed written scheme of investigation for a programme of archaeological work to protect the archaeological resource should be attached to any consent.

Other Representations

Against the proposal

Flooding

165. The scheme will accelerate possible water run-off from the site, through the Nant Garw, the Bullcroft Brook and into the Cadaxton river. NRW are currently exploring natural flood prevention. The scheme would benefit from infiltration trenches parallel to the toe of the

panels, which would intercept and distribute flows, attenuate run off and promote infiltration across the site. In order to further reduce the flow, there should be tree planting alongside the Nant Garw and leaky dams set inside the stream.

166. On 23 December 2020 over 100 homes were badly flooded in the Dinas Powys area. The flood was caused by the river Cadoxton bursting its banks. This proposed solar farm is right next to the Bullcroft which is one of 2 tributaries to the Cadoxton River. The run-off from this solar farm will increase the amount of rain entering the river course.

Construction/traffic

167. Access to this solar farm site is proposed via the single-track lanes via the B4627, which do not have any passing lanes and are not suitable for heavy goods vehicle traffic (as signposted by the Council). Not only would it mean constant pollution, blocking of the lanes to walkers and vehicles, and damage to road surfaces but it will be detrimental to the local livestock, general wildlife and farms and homes on the side and nearby these lanes. Many people who live along the lane will need to be able to get to work every day with no problems with large vehicles in the lane. The scheme has unreasonable working hours. The working hours proposed are 7am - 7pm Monday to Saturday.
168. The Leckwith Hill Bridge over the river Ely has a weight limit of 7.5 tons therefore it is not suitable for heavy goods vehicles. The vehicle movements are calculated at 482 deliveries, plus 154 stone tipper lorries, plus skip deliveries, plus general construction traffic. The local authority is not able to use a normal waste truck on Gower Lane and uses a smaller vehicle because of access issues.
169. The revised construction traffic route requires all construction traffic to travel through Llandough village instead of Leckwith bridge due to weight restrictions. There are concerns over the number of lorries going through the village and safety issues by the hospital. It has been suggested to ask if the construction traffic could consist of smaller vehicles to ease the impacts on Llandough village. The amount of traffic that will come through the roads in Llandough will be intolerable. The roads are not wide enough for the current traffic, as buses which are a necessity for the area have enough trouble now getting through, and presumably these lorries will be using the roads throughout the day exacerbating the problem.

The site

170. The site is located outside the priority areas for solar and wind farms identified in the Welsh Government's National Development Framework 2020-2040, it was asked that these issues are assessed in accordance with Policy 11 of that same document.

Visibility

171. The loss of amenity would be significant and have a detrimental visual impact. From the plans it seems that the proposed solar farm would be clearly visible from the road, and from the public footpath that runs alongside Beggan Farm used by the public. Beggan Farm is a grade II listed building which has fallen into disrepair.
172. There does not appear to be a single photograph taken from the lane where the Meadowvale footpath crosses the White Farm turn off. The views northwards from this vantage point are framed by the hills around Llantrisant and the valley in the foreground (which includes Brynwell Farm) exemplifies and is integral to this landscape being part of the Cwrt Yr Ala SLA.

Publicity

173. There has been no communication to any of the households who will be most affected by this development. Some people living in the area seem unaware of the development and we have not received any planning communication from the local authority at all.

Noise

174. Residents were concerned that the applicant's noise report did not provide a complete assessment of the noise impact of the development. As a result, the residents commissioned their own noise report by Hoare Lea.
175. Hoare Lea's first noise report concluded that without screening corrections the rated noise levels at Beggan Farm would be 40-50dB(A) and that this would represent a significant adverse impact. Based on background noise levels assumed in the applicant's report this still suggests a risk of noise disturbance due to the absence of further information or mitigation measures being put in place.
176. Hoare Lea has reviewed the applicant's revised noise assessment which was based on measured background noise levels over a period of around 1 week and the use of equipment that was consistent with the requirements of BS 4142:2014.
177. However, there are concerns that the noise levels were not measured at Beggan Farm. Although, it appears plausible that the measurement location used would be representative of background levels at Beggan Farm, there are no photos of the measurement location of the equipment. Measured levels and their analysis are not presented in further detail, and it is not possible to determine if these average levels are representative of quieter periods of day or night.
178. The applicant's revised assessment is based on differing levels for the proposed equipment, but there is no explanation for this change. Should the previous type of equipment be installed then this would result in significantly noisier emissions.
179. The noise predictions are now based on more realistic barrier effects and distance calculations, although no assessment has been made of outdoor amenity space. The noise predictions at the main residential property include a screening effect of 12dB from the buildings located to the north of the property and this prediction is more realistic.
180. To account for potential tonal noise in the proposed inverters, a penalty of +2dB was included, and this corresponds to a "just perceptible" tone. If an assessment is undertaken for the potentially worst-affected external amenity area, it is estimated that increase rated levels of around 38dB(A) could be experienced when discounting the barrier screening. This could increase to 40dB(A) if the tonal character is more clearly audible.
181. Whilst this would be comparable to the average background noise levels of 39dB(A) assumed by Hydrock, the difference could be higher during quieter periods of the day. The excess of the rating noise above the background would approach +4dB which is close to levels indicating an adverse impact according to BS 4142 (for a difference of +5dB). Similarly, for night-time periods, if the barrier reduction reduces by 3dB, the excess of the rating noise above the background would increase to +4dB, which equates to a similar increased risk of adverse impacts.
182. The applicant's revised assessment sets out several contextual assessment factors, and Hoare Lea would agree that these factors in this case would not increase the impact, despite the increased levels predicted above. There, however, remains a risk of adverse noise impact, although this is less likely to be significant. However, should the previously suggested type of equipment be installed there would be a risk of significant impacts. It is important therefore to control noise emissions from the plant through appropriate noise conditions.

183. Hoare Lea therefore recommends photos are provided of the monitoring equipment in situ and measured noise levels, justification is given for the change in manufacturer noise emissions, and that there is an assessment/description of other electrical plant at the site.
184. Given the potential risks of adverse noise impacts identified, it is still recommended that additional mitigation measures are included in the proposed design of the proposed plant. This might include attenuated plant enclosures or selection of quieter equipment, or solid screening barrier at source.
185. As significant impacts are unlikely, this could however be controlled in practice by a planning condition requiring the local authority to agree prior to the commencement of the development an assessment of the final proposals for electrical plant at the site.

In favour of the proposal

Green Energy

186. The majority of local representations were in favour of solar power and greener energy with no ongoing emissions on land that is mainly low value agricultural grassland. The developer would allow enough space between and under the panels for grazing, therefore giving it a dual purpose. The scheme is temporary, with a lifespan of 40 years. At the end of this time the site will be decommissioned and put back to its original state.

Appraisal

187. The main considerations are:

- (i) the effect on the landscape character and visual amenity of the area;
- (ii) the effect on heritage assets;
- (iii) the effect on the ecology of the area and protected species;
- (iv) whether the proposed development is acceptable in relation to flooding and hydrology, having regard to local and national planning policy;
- (v) the effect on living conditions of nearby residents in relation to noise;
- (vi) the effect on traffic flows and highway safety, particularly during the construction phase;
- (vii) whether any harm identified in relation to the foregoing and any other considerations is outweighed by the benefits of the scheme, particularly its contribution to renewable energy generation and combating the climate change emergency.

Landscape Character and Visual Amenity

188. The application site falls within the Cwrt-yr-Ala Basin SLA as designated in the VoG Council LDP. PPW recognises the value of all landscapes for their distinctive character and seeks to protect their special qualities and ensure that the opportunities they provide, including for wellbeing, tourism and renewable energy are taken into account.
189. The LVIA and LVIA addendum have been prepared in accordance with Guidelines for Landscape and Visual Impact Assessment 3rd Edition, 2013. It contains ZTV maps which identify areas from where the development could be seen on the basis of a topographical, bare-earth analysis, and cumulative ZTVs which includes the development at Woden Park Solar Farm. These maps have informed the choice of representative viewpoints from where a series of AVRs and viewpoints have been taken. These have been refined and supplemented during the passage of the DNS following concerns from residents and VoG Council. I note these criticisms of aspects of the assessment and the comments of others.

190. The LVIA has assessed the construction as well as the operational phase of the development. Whilst the construction phase, at certain times, would have a greater impact than during its operation, as it is likely to be relatively short-lived, I have focussed mainly on the operational period of the project.

Landscape Character

191. The application site and surrounding area is a rolling and undulating landscape in the Cwrt yr Ala valley SLA. The landcover is a mosaic of pastoral fields, with hedgerows often containing trees and bordering woodlands. The landform rises to the east at Cock Hill. The area is noted for its tranquillity, as no major roads run through it, at least close to the site. The area has a strong sense of place where vernacular buildings, broadleaf woodland and well treed hedgerows complement well managed farmland.
192. The immediate area of the site is isolated both physically and visually from its surroundings. It contains just a few isolated buildings and two footpaths with potential views towards the site. The ridgelines to the west, north-east and east are covered with woodland.
193. The LANDMAP evaluation of the aspect areas is high for landscape habitat and visual and sensory features of the area.
194. The scheme would retain the site's distinctive field pattern, and the high value and condition of the landscape will be protected by the retention of all boundary elements. The site also has a hidden quality and is well-screened from the surrounding area, minimising potential effects upon landscape character generally. The identified and distinctive landscape characteristics of the Landscape Character Area of Cwrt-yr-Ala would be retained by the proposed development.
195. The development would be visible, particularly from close quarters but would be seen in the context of the present field patterns that would continue to be framed by hedgerows and trees that typify the landscape. The effect of the proposal upon landscape character may slightly alter the perception of rural pasture through a change from grassland to solar panels. This could increase the perception of human influence on the landscape. Although there are public rights of way to the south of the site there is no public access in close vicinity of the site and any significant visual connection to and from the site mean that any effect will be highly localised. Beyond this localised area of the site, the impact on the surrounding area and SLA would be slight.
196. Once constructed the development would involve very little activity that would disrupt the tranquillity of the rural landscape. The relatively low level and horizontal emphasis of the arrays means that they would be seen to follow the existing topography. The controlled use of fencing would result in an appearance consistent with the primarily agricultural character of the area. Thus, whilst the presence of the development in the surrounding landscape would be clearly noticeable, it would not undermine its character. Any impact would reduce significantly with a relatively modest increase in distance from the site.

Visual Amenity

197. The visual impact of the scheme has been informed by mapping the ZTV of the scheme in isolation and in combination with Woden Park Solar Farm.
198. The development has sought to avoid or mitigate potential landscape impacts. The photovoltaic panels would be seen within the existing field pattern and enclosing vegetation. Existing field boundaries would be utilised to minimise the need to create new accessways and breaches of field boundaries. The battery storage units, DNO and CCTV columns would be painted dark green or brown to sit within the landscape.

199. There are several viewpoints from close quarters to the site from the track between Brynwell Farm and Beggan Farm, and views from the PROWs south of Brynwell Farm. Overall, there are short glimpse views of the site from the track where there are gated accesses to fields south of the site and where there are views over hedgerows and between mature trees.
200. Footpath users have a high sensitivity to development in the SLA and footpaths traverse this area towards Brynwell Farm which then heads east towards Cock Hill but passing close-by to the site. In these views there would be a change from open fields to horizontal panels. However, views are fleeting and the strong sense of field enclosures by hedgerows and trees would be retained by the scheme and the southern fields would limit this stark change by the planting of a substantial wildlife meadow. By allowing the existing southern boundary hedge and trees to grow, a matter which is controlled through the final LEMP condition, the residual effect would reduce the slight adverse effect to slight or no adverse effect beyond 7-10 years.
201. Several viewpoints were taken on the PROW crossing the fields between Meadowvale Farm and Brynwell Farm (VP4). An additional viewpoint VP5 (Document A22) from PROW north of Meadowvale Farm was taken looking north-west towards the site from higher ground. The latter view of the site is more visible than viewpoint VP4 due to its elevation, but the view of the site is further away. Although footpath users would be walking east-west they would experience the change in the view when looking north from this point. VoG Council describe the change in this view as a significant encroachment into the character of the area even though the field patterns are maintained.
202. I consider, the view is more expansive, taking in the wider valley vista which incorporates hills, tree lined slopes, open fields close-by and man-made influences of an electricity line and pylons and Brynwell Farm in the foreground. The proposed development whilst visible in the medium distance would not dominate because the undulating slope of the site would be significantly softened by trees and boundary hedgerows. I would agree that from VP5 the impact is more than localised, and it would be a detracting feature in otherwise attractive view. However, I would conclude that it would have a moderate adverse effect on the SLA in this viewpoint, but it would not in my view be a significant impact.
203. I viewed the site from Cwrt-yr-Ala and Caerau Fort. I would agree with the LVIA (and addendum) that the site is indistinct behind trees, even in winter, when seen from Cwrt-yr-Ala. There would be some partial views of the site from Caerau Fort, and in combination with Woden Park Solar Farm. However, the view is filtered by trees and hedgerows and the proposed development would not be prominent and only partially visible. I would concur with the LVIA that the effect is assessed as negligible and not adverse.
204. In terms of cumulative impact, Woden Park Solar Farm was not visible from within the proposed site given the dense and high hedgerow which surround it bordering the application site. Combination views of both Woden Park and the proposed development would be few and not significant. The identified view from Caerau Fort of cumulative impact would be negligible in the wide vista and would be filtered by trees and hedgerows.
205. PPW (paragraph 5.9.21) advises that developers should, wherever possible, consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design, and other measures. The applicant explains that one of the measures deployed to minimise the visibility of the solar arrays and associated equipment from the nearest public vantage points is to avoid using the fields adjacent to the track that bound much of the site. In this case the southern part of the site would be

planted with a wildflower meadow. I am satisfied that it is generally compliant with this policy advice.

206. For the above reasons I find that the character and visual amenity of the landscape would not be significantly affected. The proposal would not have an unacceptable adverse impact on the surrounding landscape and thus aligns with criterion 1 of Future Wales policy 18. The scheme would not conflict with the protective provisions of VoG Council's policies MD1(1) MG17, SP10 and MD19 of the LDP, which is that renewable energy development will be permitted where there is no unacceptable impact on landscape importance and character of the area.

Heritage Assets

207. The AHA identifies that the site does not contain any heritage assets. The AHA does not identify any effect on historic assets arising from adverse changes to their setting.
208. CADW is satisfied that the 1km radius study area through ZTVs is appropriate.
209. CADW concurs with the AHA that there would be no impact on the setting of designated assets. VoG Council's Conservation Officer had no further comment to make and noted the additional information in the AHA addendum.
210. The approach taken in the AHA (and addendum) is consistent with TAN24: The Historic Environment. Based on the ZTVs the assessment concludes that the scheme is not capable of impacting on the setting of most designated assets in the study area. The assessment considers three schedule monuments, one listed building, and two Registered Parks and Gardens.
211. No adverse effects are identified on Leckwith Bridge (also a Grade II listed building), Caerau Camp and Ely Roman Villa. In relation to Caerau Camp, whilst there would be a very minor change to the monument's wider setting, this would not result in any adverse effect on its significance and similarly in relation to the listed Church's setting within the SAM. There would be no adverse effect on the significance and setting of The Registered Park and Garden Cwrt-yr-Ala (Grade II) and The Grade II* Historic Park and Garden at Coedardydyglyn. Informed by my site visit, I agree.
212. With regard to Brynwell Farm, I concur with assessment that the listed building derives its significance from its evidential value of architectural and historic interest. Brynwell Farm would have been built to oversee and manage the agricultural lands associated with it. However, the asset's immediate setting is defined by the earth banks and outer bailey and outbuildings, with its wider setting taking in other isolated buildings and the agricultural landscape.
213. The northern elevation has a medieval cusped lancet window which suggests a possible first floor hall. Beneath this is a lean-to with a curved angle wall, and attached are agricultural buildings of stone, partly limewashed and render. No access was available to the building as it was fenced-off. The main frontage of the farmhouse faces towards Beggan Farm and, there are oblique views in the direction of the site.
214. There would evidently be a change in the view from the asset towards the north and the site, although there is already present telegraph poles and electricity pylons. It is noted that the panels are also likely to be screened and filtered in views by hedgerows, the wildflower meadow and other vegetation in the vicinity of the farm.
215. The change in the setting of the asset would be visible to the north, but within the southern courtyard and main aspects of the building there would be no change. The agricultural association would still be strongly appreciable in this setting.
216. I conclude that the contribution made by the setting overall would not be so changed as to reduce its contribution to the setting of Brynwell Farm. The building would still be

understood in relation to its agricultural surroundings, and its topographic position is unchanged, and its architectural and historic interests are not harmed.

217. In relation to buried archaeology, the baseline data indicates the presence of medieval occupation and points to the potential for the site to contain contemporary archaeological remains. The AHA notes that the extent of any potential archaeological remains may have suffered some degree of damage to its upper levels by historic and modern ploughing.
218. GGAT recommend that a condition requiring the applicant to submit and implement a detailed written scheme of investigation for a programme of archaeological work to protect the archaeological resource should be attached to any consent.
219. I am satisfied that an archaeological assessment has been undertaken in compliance with VoG Council's policies MD8 and SP10 of the LDP, and that it demonstrates that, with suitable mitigation secured by the recommended conditions, the impact on the archaeology of the site is acceptable.
220. I find that there are no unacceptable adverse impacts on national statutorily protected built heritage assets and therefore the proposal aligns with criterion 6 of Future Wales policy 18. The scheme would not conflict with the VoG Council's policies SP10 and MD8 of the LDP.

Ecology

221. The site comprises several fields of improved pasture and marshy grassland intersected and bound by a network of hedgerows. The site is bound to the west by a wooded ASNW stream corridor and is surrounded by further agricultural land and an existing solar farm to the north. There are two ponds offsite to the west which were assessed for their potential to support Great Crested Newts. The laydown area is situated some 760m to the south of the site and along Gower Lane. The laydown area comprises a single improved grassland field bounded by woodland listed on the Ancient Woodland Inventory on the south-west and northern boundaries. The passing bays along Gower Lane to the site comprise a mix of existing bays, poor semi-improved grassland margins, scrub, and species poor hedgerows.

Designated Sites

222. The March 2022 EIA concludes that given the nature of the development, significant impacts to the Severn Estuary European Marine Site (approximately 5.1km south-east of the site) during construction and de-commissioning are highly unlikely, and no impacts are predicted during operation. A Construction Environmental Management Plan (CEMP) will be implemented to avoid any direct impacts from pollution during construction and decommissioning and a 10m buffer will be maintained to Nant Garw within which no construction may take place to protect the corridor during operation. There are no functional links between the Site and Cardiff Beech Woods SAC and no impacts are predicted.
223. NRW has reviewed the applicant's material on ecology and has indicated in its latest response that conditions should be imposed to secure the necessary mitigation and biodiversity enhancements provided by the scheme. No concerns have been raised concerning the impact of the proposed development in relation to the two European sites, given the distance to these areas.
224. I am satisfied that, provided that the suggested conditions are imposed, the scheme would not harm any of these internationally important sites, and no significant effects are identified.

225. The March 2022 EIA identifies that the closest SINC's Coed y Ddylluan, Leckwith Woods and West Hill Wood to the site. West Hill Wood is located adjacent to the lay down area with woodland connectivity in the northern corner of the field. The March 2022 EIA identifies 12 non-statutory SINC's within 2km of the site. The EIA concludes that no direct impacts are predicted and measures to avoid indirect impacts will be included within the final submission of the CEMP condition.
226. The Cwm Cydfin SSSI is some 1.7km south-east of the site and is set within a larger complex of woodlands in the valley of a small tributary of the river Ely. The Nant Garw watercourse, which is situated on the western boundary of the site, is not a tributary of the Nant Cydfin SSSI as confirmed in (Document A2). Therefore, there are no pathways from Nant Garw that would affect Cwm Cydfin SSSI, and no impacts from the development are predicted. NRW confirm that there is no pathway through surface water from the site to the SSSI, and Leckwith Woods and areas of woodland form a buffer between the site and the SSSI. NRW notes that the SSSI is sensitive to increases in both nitrogen and acidity levels from air pollution. Nant Cydfin is situated to the east of Leckwith Road B4267. Whilst the access route for the site passes part of Cwm Cydfin SSSI, NRW notes that the Revised Transport Statement predicts no significant increase in traffic travelling along that route with a maximum of 8 vehicles per day during the 6-week construction phase. Given that there is a dust management plan provided and if measures are adhered to NRW are satisfied that there should be a low risk of impact on Cwm Cydfin SSSI.
227. I would concur with that assessment that there are no likely significant effects on the SSSI and closest SINC's.
228. The EIA notes that the proposed solar arrays will be suitably offset from the adjacent ASNW at Nant Garw to the west ensuring that root protection zones are unaffected and construction stage impacts are avoided. The EIA concludes that the proposal will not result in any direct or indirect impacts on the woodland during construction or operation of the solar farm. I have no reason to depart from that view.

Protected Species

229. Surveys were undertaken on the main site, the laydown area and passing places. In brief NRW raise no issue in relation to the extended phase 1 habitat surveys, subject to the submissions of final LEMP and CEMP conditions detailing avoidance, precautionary and mitigation measures. NRW also note that small discrete sections of hedgerow will be removed for the laydown access splay, and minor scrub clearance required for some of the passing bays. NRW note that precautionary methods should be adopted as outlined in the March 2022 EIA to avoid impacts on dormouse, and that the stated buffer distances are maintained for woodland (5m) and hedgerow (2m).
230. The data search returned no records of great crested newts (GCN) from within 2km of the site. Five ponds have been identified within 250m of the site boundary. The core GCN dispersal and foraging range around a breeding pond is recognised to be 250m. Further surveys were undertaken in the appropriate season of 2021 to ascertain suitability and potential presence of GCN. One pond to the west some (220m) was assessed as offering average suitability to support GCN and this was subject to a DNA survey which yielded a negative result. Other ponds were assessed as not being suitable to support a breeding population. The EIA concludes the proposed development will have no direct effects on off-site ponds. Standard good practice pollution prevention and runoff control measures would be in place during construction as set out in the final CEMP condition. No long-term habitat severance or fragmentation effects would occur that could adversely affect the favourable conservation status of amphibians. Should GCN be

encountered during the construction period, work will stop, and advice will be sought from NRW to obtain an appropriate licence.

231. The South-East Wales Biodiversity Records Centre (SEWBRc) returned eight records of badger occurring within 2km of the site. The EIA notes that the future presence of badgers cannot be ruled out and precautionary measures should be deployed including a walkover by an ecologist to search for new setts prior to works commencing.
232. The data search returned records of at least six bat species within 4km of the site including lesser horseshoe bats. Several trees within hedgerows were identified as having bat roost potential, although these trees are unaffected by the proposed development. Tree T1 which is located centrally within a field in the site will be removed to accommodate the development. This tree is identified as an overmature dead oak and was assessed to not offer suitable features for roosting bats, but precautionary measures are recommended. Construction lighting should not be allowed to spill out onto woodland edges, hedgerows and other linear features and this should be controlled in the submission of the final CEMP condition.
233. The data search returned records of multiple bird species including many of conservation concern within 2km of the site. These included cuckoo and fieldfare which are red listed species of conservation concern. The following amber listed species have also been recorded within 2km of the site, kingfisher, house sparrow and kestrel.
234. Anecdotal sightings of bullfinch, song thrush, yellowhammer, blackcap, and skylark were recorded during the survey work. However, there was no indication that the species nest on site and the fields did not provide suitable nesting opportunities. Trees and hedgerows surrounding and intersecting the site are likely to provide suitable nesting habitat, and these are to be retained as part of the proposals. The habitats directly impacted by the proposal (the improved and marshy grassland fields) offered negligible potential to support ground nesting birds.
235. The EIA concluded that the limited value of the on-site habitats and the abundance of similar and better-quality habitats available in the wider landscape, the site was considered unlikely to support a notable breeding bird assemblage and was of local importance for breeding birds. To avoid harm to nesting birds, all vegetation clearance should commence outside of the nesting bird season, which runs from March to August (inclusive). Should this not be practicable, works should be preceded with a pre-works check by an ecologist to look for active nests, and any active nests will be retained and protected with a suitable buffer until all chicks have fledged.
236. Two records of hazel dormouse were returned within 2km of the site. The closest was from Coed y Cymdda woodland approximately 0.8km to the west of the site. Given the presence of favourable habitat for the species such as species rich hedgerows (albeit in poor condition) on the site and the connectivity with off-site areas of broad-leaved woodland, it was considered that the species could be present. The site has potential to be of up to local importance for the species. The EIA assesses that no significant impacts to dormice are predicted as no significant amount of hedgerow is to be removed as part of the development. If dormice are then found to be present on site, a licence may be required from NRW prior to works.
237. The data search returned no records of water vole within 2km of the site and site habitat was considered unsuitable for the species. Nine records of otter were returned by the data search with most reacting to the river Ely approximately 1.3km to the east of the site. The data search returned records of all four common reptile species found in the UK within 2km of the Site. There is potential for hedgerows to support common reptiles such as slow worms and potentially grass snake. The site has potential to be of importance at the local level for common species of reptile.

Laydown area and passing places

238. Concern have been expressed by VoG Council and residents concerning the extent of hedgerow removal associated with the laydown area/splay and passing places. Movement of heavy machinery and vehicles would avoid impacting on woodland and hedgerows and where necessary protective fencing would be erected. The compound would be positioned with at least a 5m buffer to woodland and 2m for the hedgerow.
239. One and a half metre and 0.8m clearance of hedgerow would need to be removed to facilitate the splay for the laydown area. This is much less than the hedgerow removal envisaged in the response by VoG Council and residents (Documents IP3 and IP4) to the September 2021 bundle of information. Banksmen would be used to direct vehicles and to avoid the need for further vegetation removal. It is envisaged that an Ecological Clerk of Works will take precautionary steps before these sections of hedgerow are removed and check for nesting birds and dormice, and in the lower part of the hedge hedgehogs, amphibians, reptiles and GCN. At any point of discovering protected species during these areas of clearance work will stop and advice sought from NRW with a view to obtain a license should that be needed.
240. In the laydown area which will be utilised for temporary storage of materials and transfer to the site, it is accepted that there would be degradation of the grassland caused by compaction and disturbance of the ground. However, due to the temporary nature of the proposal, the impacts will also be temporary, and the grassland will be re-instated once construction is complete. The laydown area will be harrowed to loosen and aerate the compacted soil and a suitable seed mix would be planted.
241. Some scrub clearance will be required for passing bays 6, 7, 9 and 10 and will be undertaken under a precautionary method as outlined above. For other passing bays temporary ground re-enforcement matting will be deployed to reduce the impact of compaction on the root systems of adjacent trees.

Biodiversity enhancements

242. In addition to the mitigation requirements biodiversity enhancements form part of the proposal. These include planting a 1.2ha wildflower meadow to the south of the site. A review of the management activities of the LEMP every five years for the period covering the lifespan of the proposed solar park to ensure long term benefits for all retained, enhanced, and created habitats are delivered. The EIA notes the intention to plant-up gaps in hedgerows across the site and to reinstate hedgerows and improve habitat connectivity. Hedgerow breaches that are not required for access as part of the development would be planted with lengths of new hedgerow comprising a variety of native species.
243. The management of retained hedgerows within the site will aim to achieve a minimum height of 3m and a width of 2m. Hedgerows would be cut on a minimum 3-year rotation, with a third of the hedgerow allowed to grow for a minimum of 5 to 7 years, allowing vegetation to fruit, providing a food source. Retained field margins would be seeded with a species-rich grassland or wildflower mix. Bat and bird boxes would be installed on retained trees within hedgerows to enhance the site for biodiversity. The locations and specification of these measures will be controlled through the submission of the final LEMP.
244. The measures beneficial to biodiversity that have been incorporated within the scheme and those that would be secured through the recommended conditions are significant, as is the extent to which conditions would avoid or mitigate any potential harmful impacts. I consider these are in line with Section 6 of The Environment (Wales) Act 2016 Biodiversity Duty. I consider that, in line with criterion 5 of Future Wales policy 18, the proposal includes biodiversity enhancement measures to provide a net ecological benefit.

245. I consider that the scheme would cause no unacceptable impacts on national statutory designated sites for nature conservation (and the features for which they have been designated), or protected habitats and species, thereby satisfying criterion 4 of Future Wales policy 18 and VoG Council's LDP policies MD9, MG19, MG20 and MG21.

Flooding

246. The cabling route falls within zones B, C1 and C2 when it crosses the river Ely over Leckwith Bridge to the point of connection. The cabling would be routed through the existing cabling ducts within the verge of the bridge. In the event that a new bridge is granted permission alongside the proposed development at Leckwith Quays the applicant indicates that the cabling would be routed via one of the many service ducts below the deck level of the road.
247. PPW, at para 6.6.22, advises that planning authorities should adopt a precautionary approach of positive avoidance of development in areas at risk of flooding from the sea or from rivers. Surface water flooding will affect choice of location and the layout and design of schemes, and these factors should be considered at an early stage in formulating development proposals.
248. TAN 15 provides more detail including, at paragraph 6.2, that highly vulnerable development and Emergency Services in zone C2 should not be permitted. All other new development should only be permitted within zones C1 and C2 if determined by the planning authority to be justified in that location. Development will only be justified if it can be demonstrated that:
- a. its location in zone C is necessary to assist, or be part of, a local authority regeneration initiative or a local authority strategy required to sustain an existing settlement; or
 - b. its location in zone C is necessary to contribute to key employment objectives supported by the local authority, and other key partners, to sustain an existing settlement or region; and,
 - c. it concurs with the aims of PPW and meets the definition of previously developed land; and,
 - d. the potential consequences of a flooding event for the particular type of development have been considered, and in terms of the criteria contained in sections 5 and 7 and appendix 1 found to be acceptable.
249. There is no dispute that the scheme does not satisfy any of the first three of the above justification tests. The applicant notes that the cabling forms part of the DNS application but points out that in isolation the cabling works could be permitted development under Schedule 2, Part 17 of the (General Permitted Development) Order 1995 (as amended). The applicant notes that if the cabling works were undertaken by Western Power Distribution as the DNO utilising their powers as a Statutory Undertaker then this would be a fallback position that would negate the need for the justification test in TAN 15.
250. The applicant has confirmed that the cables would not be fluid filled and would be protected and power could be disconnected remotely in the event of a flooding emergency. NRW are satisfied with these responses in relation to the consequences of flooding.
251. The applicant refers to the site selection sequential test (Document A8) as justification that no other suitable site is identified within the search area. Referral is also made to the Llanwern solar farm decision (application ref: 3150137) where the Cabinet Secretary for Energy, Planning and Rural Affairs accepted the Inspector's finding that the solar scheme

under consideration fell within this exception of paragraph 5.3. This explains that some uses should be treated as exceptions to the general rule in relation to the vulnerability of uses to flooding. These include boatyards, marinas, essential works required at mooring basins, and development associated with canals. They are not subject to the first part of the justification test (as set out in i to iii above) but are subject to the acceptability of consequences part of the test (iv).

252. This part of the proposal relates to the cabling which there is a probable fallback position and justification is provided in terms of grid connectivity and the high number of sunshine hours as was the case in the Llanwern decision. I consider there are good reasons for locating the ancillary componentry of the proposal within but crossing over these flooding risk zones as an exception to the first three justification tests.
253. In response to the fourth of the TAN15 justification tests, the application has been accompanied by a Flood Consequences Assessment (FCA) which was revised in September 2021 (Document A7). Following the publication of FMfP the applicant submitted in March 2022 Technical Design Note FMfP and the relevant maps (Documents A31-A34).
254. The assessments note that the position of the cabling on Leckwith Bridge is likely to be above any flood event from the river Ely at this location. The installation of the cabling within the existing highway infrastructure would not cause an increase in flood risk to third party land. The Technical Design Note on FMfP confirms the extent of the new Flood Zones (1,2 and 3) to have virtually the same extent to the existing Development Advice Mapping (DAM).
255. On review, the mapping provided by NRW confirms that although the extent of the area at risk of flooding has altered slightly in the new FMfP, given the nature and extent of the proposed development the proposal is acceptable. The updates/changes to the flood extents and those shown within the FCA are representative of the most up-to-date information available for assessing flood risk at this location.

Hydrology of the site

256. The FCA update notes that proposed photovoltaic panels will be positioned across the main site, where potential overland surface water and groundwater flood risks have been identified. However, panels will be elevated approximately 0.85m above ground level on a modular frame. It is noted that any shallow overland surface water and groundwater flood flows will be able to flow unimpeded beneath the proposed panels, and between the legs of the proposed modular frame.
257. The proposed drainage strategy for the site utilises the existing topography and natural drainage regime to ensure that any overland flows, although not increased compared to the existing situation, will be allowed to run-off overland as shallow 'sheet flow' to the valleys running through and adjacent to the site, as is the existing situation. The FCA assumes that grass cover will be retained across the site (except for the proposed gravelled access track and construction compounds), and this will therefore maintain the existing hydrological regime, without resulting in any increased volume or intensity of run-off. It is considered that there would be no alteration of catchment drainage patterns or the unintentional creation of preferential flow paths. The change in land cover would contribute to a more natural infiltration rate with vegetation growing beneath the panels intercepting rainwater falling between the gaps in the panels. These measures incorporating buffer strips next to hedgerows and the proposed wildflower meadow as part of the site would bring about a favourable drainage response compared to the existing situation.
258. As a result, VoG's Drainage Engineers considered that a specific drainage condition would not be needed, and the matter would be controlled through Schedule 3 of the

Flood and Water Management Act 2010 which makes Sustainable Drainage Systems (SuDS) a mandatory requirement for all new developments. SuDS Schemes must be approved by the local authority acting in its SuDS Approval Body role (SAB) before construction work begins. However, even though the DNS would be regulated this way, VoG Council has requested that a drainage condition be imposed in any event due to concerns from local members on drainage and flooding.

259. I conclude that the scheme is consistent with flood risk policy set out in PPW and TAN15. It follows that it is also consistent with VoG Council's LDP policy MD7 and Cardiff LDP policy EN14. The cabling elements of the scheme has been designed to withstand the predicted climate change effects on flooding and demonstrates that the risk and consequences of flooding could be acceptably managed.

Living conditions - noise

260. Following consideration of the initial consultation on the application the proposal was revised to re-locate the battery storage units some 100m north of Beggan Farm. The application was accompanied by a technical noise assessment. This was reviewed by occupants of Beggan Farm's specialist noise consultant. Some concern was expressed on the precise location of the noise recording equipment and the type of equipment deployed.
261. These concerns and comments were further assessed by the applicant's noise assessor. Information was provided on the location of noise monitoring equipment and the type of equipment that would be used in the scheme. The noise specialist for the occupants of Beggan Farm having reviewed the noise impact assessment and considers that significant noise impacts would be unlikely to occur but would require assurance that any adverse impact can be mitigated and controlled through the imposition of a planning condition.
262. VoG Council's Shared Regulatory Services agrees with the applicant's noise assessment and revised details and that a suitable planning condition be imposed. Whilst there remain concerns from the occupants of Beggan Farm, I am satisfied that an appropriate condition is necessary to ensure that the living conditions of nearby residents are not harmed by the development in relation to noise.
263. I find that there are no unacceptable adverse impacts by way of noise and therefore the proposal aligns with criterion 7 of Future Wales policy 18. It follows that the proposal is compliant with VoG Council's LDP policies MD2(8) and MD7(4).

Traffic and Highway Safety

264. The applicant has revised the traffic route for construction traffic to the site so to avoid Leckwith Bridge (which is weight restricted). This would be detailed through the submission of a final Construction Traffic Management Plan (CTMP) imposed by a planning condition. The revised route would take the A4055 bridge crossing and then turn onto the B4267 traveling north through Llandough. The applicant has provided a Revised Transport Statement (Document A5) and Revised Construction Management Plan (Document A6).
265. These documents indicate that 16.5m articulated heavy goods vehicles would deliver material/equipment to the laydown area. Smaller vehicles 4.6t light vans broadly 6m in length would take the material from the laydown area to the site. Swept path analysis has been provided (Document A26) to demonstrate that an articulated lorry can make the turn from and to the B4267 at Gower Lane. The applicant has undertaken a full survey of Gower Lane has provided information on passing places for these vehicles including information on ownership/location on adoptable highway land/extent of vegetation trimming. Two passing places are needed on the lane leading to the laydown area. The

remaining eight passing places are located between the laydown area and the site. The applicant in agreement with the local highway authority will undertake a pre-construction survey of the haulage route and a post-construction survey to identify any remedial works that would be required. The studies indicate that it is not anticipated that Gower Lane would be closed through the six-week period when deliveries would occur.

266. Construction times/periods will be regulated by planning condition. It is envisaged that there would be a total of around 241 deliveries (482 two-way movements) to the site. Deliveries will arrive within the six-week period Monday-Friday only. This would equate to around eight deliveries (16 movements) per day. There would be construction workers also arriving at the site, but the numbers are anticipated to be low on a day-to-day basis.
267. The local highway authority raises no objection to the revised details (Document IP3) subject to the imposition of conditions. There would inevitably be some disruption to local traffic during this period. However, there is no technical objection from VoG Council to the revised construction traffic route via Llandough. The applicant's information notes that the timing and number of construction vehicles compared to the volume of traffic using this road would be inconsequential to overall traffic flows. There is no technical evidence to contradict this finding.
268. Nonetheless the use of appropriate traffic management regimes, as is commonplace with schemes of this nature, would minimise any difficulties. It is not envisaged that Gower Lane would need to be closed during the construction phase of the development. In any event, the local highway authority would retain control over any prospective road closures.
269. In my view the traffic and access arrangements for the temporary period of construction is acceptable and there is no evidence to suggest that the proposal would harm highway safety during this period.
270. I find that there are no unacceptable adverse impacts on the transport network through the transportation of components during the construction phase and therefore the proposal aligns with criterion 9 of Future Wales policy 18. It follows that the proposal is compliant with VoG Council's LDP policy MD2 and policy T6 of the Cardiff LDP.

Benefits of the Scheme

271. The scheme's 25 MW capacity would generate renewable power sufficient to power up to 7,500 homes over its operational lifespan and to displace some 10,050 tonnes of CO₂ a year. This represents a substantial contribution to the production of energy from a renewable resource and to the reduction in greenhouse gas emissions. Such a contribution is significant in the context of the Welsh Government targets and its commitment to address the climate emergency.
272. The battery storage facility provided by the proposed container units would ensure that the supply of energy generated by the panels can be controlled to reduce the mismatch between peak demand and supply. The benefits of an increased use of energy storage to provide a balance in this respect is recognised in PPW.
273. Future Wales policy 17 confirms Welsh Government's 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.
274. It 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 target to generate 70% of consumed electricity by renewable means by 2030 to combat the climate emergency.

Other Considerations

275. In addition to the above main considerations there are some other matters that have been raised which are addressed below.
276. The application site has been chosen because of a combination of reasons (Site Selection Sequential Test (Document A8) including the high number of sunshine hours; that the agricultural land is not classified as 'best and most versatile', the availability of a sufficiently large site to allow the economies of scale which would make a scheme viable. The essential attribute of the site, and the one which ties it to the immediate area, is its proximity to 132 kV power lines with the capacity to accept the electricity which would be generated.
277. The site falls outside VoG Council's LDP policy MG30 which identifies areas of search with potential for solar energy schemes. Although the site lies outside of the 'Local Search Areas' identified under Policy MG30, the policy makes clear (paragraph 6.170) that the identified areas provide only an indication of solar energy potential rather than specific areas of safeguarded land for solar development.
278. The site is identified as mineral safeguarding area under VoG Council's LDP policy MG22. The proposed development adjoins an identified dormant mineral site known as Ely Brickworks LDP policy MG24. However, I would concur with VoG Council's assessment that the proposal would not conflict with the objectives of policies MG22 and MG24 of the LDP.

Conditions

279. The applicant has provided a set of agreed planning conditions with VoG's local planning authority (Document A21 - Section 6 pages 19-25). These suggested conditions incorporate NRW and GGAT requirements and which, subject to minor refinements, are set in the list of recommended conditions in Annex A. They meet the tests set out in Circular 16/14: The Use of Planning Conditions for Development Management (Circular 16/14) and are all necessary, mostly to ensure that the development avoids, or where that is not possible, mitigates as far as is reasonable, the potentially harmful effects of the scheme.
280. VoG Council has provided commentary on the approved plans condition and questions whether it represents the submissions provided to PEDW, and has all ambiguity/inconsistency between the documents, including that relating to the extent of hedgerow/bank/vegetation to be removed as part of the highways works/passing bays/dropdown areas, been resolved.
281. To this end I have revised the wording of the suggested condition to include, "*Subject to the requirements of other conditions attached to this permission the proposal shall be carried out in accordance with the following plans.*" The final versions of the scheme will be approved through the LEMP, CEMP and CTMP conditions, and VoG Council retain control over their content.
282. I do not consider there are any disparities between the document and plan list in the latest iteration of the supporting information. The plans condition should list the approved plans to which the proposed development must conform to, and this would not normally relate to a statement of intent detailed in emails or photo visualisations. I am therefore content that the list is accurate and further controls are to be applied through the suite of other conditions.
283. To ensure that the site is properly restored at the end of its 40-year lifetime a condition requiring the approval and implementation of decommissioning works is necessary including that such works are undertaken earlier should the solar farm permanently cease to operate prematurely. To ensure that the road network, hedgerows, and verges are restored a pre-development and post construction condition survey of the haulage

and cabling route are sought. There is no need to specify who will be carrying this work since the local planning authority would be approving the scheme.

284. A condition controlling construction times and delivery is necessary in the interests of highway safety and living conditions. I have made minor alterations to the wording to remove the tailpiece '*unless otherwise agreed in writing*' on this condition and others where this appears.
285. The approval and implementation of the CTMP, CEMP and LEMP are required to control the construction, traffic, delivery and passing places, and thereafter the site management. I have made minor revisions to ensure that duplication is avoided on construction times which is already covered and the requirements under Considerate Constructors which is regulated separately and should not be duplicated for planning purposes.
286. I do not consider that the surface water drainage condition is needed as this would duplicate the provision of the Flood and Water Management Act 2010 which makes Sustainable Drainage Systems (SuDS) a mandatory requirement for all new developments. The SuDS scheme must be approved by the local authority acting in its SuDS Approval Body role (SAB) before construction work begins and therefore retains control of this aspect of the development.
287. For these reasons I have outlined under the main considerations on noise, I am satisfied that an appropriate condition is necessary to ensure that the living conditions of nearby residents are not harmed by the development. However, I have modified its terms so that a maximum noise level is not exceeded as is set out in Circular 16/14.
288. I do not consider that a condition restricting fencing under permitted development rights is necessary. Fencing proposals form part of the application and have been considered. There is a presumption against such restrictions, and it has not been shown that the condition is reasonable having regard to the advice in paragraph 5.105 of Circular 16/14.
289. The battery storage units, DNO componentry, CCTV columns are to be finished in dark green or brown colour. Tree felling is controlled and there shall be no external lighting of the site. A programme of archaeological work shall have been secured before work starts. The reasons for imposing each of the recommended conditions are summarised in the Annex and, in most cases, have already been described in this appraisal. The details of passing places and appropriate mitigation of vegetation clearance are needed to ensure that the scheme can be delivered in accordance with the proposal's accompanying assessments. I have combined the last two conditions concerning the cabling installation on Leckwith Bridge.

Planning Balance and Overall Conclusion

290. I have concluded that the proposal would not give rise to an unacceptable adverse impact on landscape character and visual amenity of the area, heritage assets, ecology of the area and protected species, flooding, and hydrology, living conditions of nearby residents in relation to noise and traffic flows and highway safety.
291. The main benefits arising from the scheme would be its contribution to renewable energy generation and reduction in CO₂ emissions. The on-site storage of power generated from the panels provides benefits in terms controlling the rate of flow to the grid, enabling the peaks and flows of production to be evened out to align better with consumption. The scheme would also provide local economic and employment benefits.
292. I afford these benefits considerable weight in the light of the support for such contributions in policies 17 and 18 of Future Wales which sets out Welsh Government's

approach to promoting the increased production of renewable energy in a way that seeks to strike an appropriate balance with the protection of other relevant interests.

293. Future Wales is the most recently adopted part of the development plan and contains the most directly relevant policy to renewable energy projects of national significance. The proposal conforms with VoG Council's LDP, and there are no identified conflicts with the Cardiff LDP. I conclude that the proposal complies with the development plan.

Recommendations

294. That planning permission be granted for both the main application and the secondary consent application, subject to the conditions attached at Annex A.
295. In reaching my recommendation, I have taken into account the requirements of sections 3 and 5 of the Well-Being of Future Generations (Wales) Act 2015. I consider that this recommendation is in accordance with the Act's sustainable development principle through its contribution towards one or more of the Welsh Ministers' well-being objectives.

Iwan Lloyd

INSPECTOR

ANNEX A - Schedule of Recommended Conditions for both Applications

- 1) The development shall begin not later than five years from the date of this decision.

Reason: To conform with the requirements of Section 91 of the Town and Country Planning Act 1990.

- 2) Subject to the requirements of other conditions attached to this permission the proposal shall be carried out in accordance with the following plans:

1. 20.13_100_SITE LOCATION PLAN_REV B_PLANNING ISSUE Brynwell Farm
2. 20.13_301 REV D – SITE BLOCK PLAN – PROPOSED
3. 20.13_302 – SITE BLOCK PLAN – PROPOSED – DNO COMPOUND AREA
4. 20.13_302_SITE BLOCK PLAN PROPOSED_DNO
SUBSTATION_PLANNING ISSUE Brynwell Farm Solar Site_12102020
5. Ecological Impact Assessment Rev2 (March 22)
6. Great Crested Newt Addendum
7. 10087A - Solar Photovoltaic Glint and Glare Study - Brynwell Farm Solar -
02March2021
8. Tree Constraints Plan - 10693 TCP 07_Brynwell
9. Tree Survey - 10693 TS 07_Brynwell
10. Transport Statement - Revised TS 16426-HYD-XX-XX-RP-TP-4002-P01
11. Noise Impact Assessment - 16426-XX-HYD-ACO-Brynwell Battery Storage
Noise Impact Appraisal - Revision 1 and associated photographs
12. 3261558 - Brynwell Farm Solar - Outline Construction and Environmental
Management Plan
13. 3261558 - Consultation Report V2 April 2021
14. 3261558 - Planning Statement
15. Brynwell Farm Solar Project Landscape and Ecological Management Plan
March 2021
16. Brynwell Farm Solar Project LVIA 11.3.21
17. Brynwell Solar Project LVIA Plans and Representative Views 11.3.21
18. Constraints Plan - edp6698_d004a
19. 3261558 - Further Information in response to Inspector's Request (September
21)
20. edp6698_r001-A-Archaeological and Heritage Assessment
21. edp6698_r002-B-Archaeology and Heritage Assessment Addendum
22. Email with VoG LPA re Ecology Comments – Dated 9TH August 2021
23. Flood Consequences Assessment 16470-HYD-XX-XX-RP-FR-0001_P06
24. 3261558 - Site Selection Sequential Test
25. Email from LPA re Drainage and Planning Conditions

26. Leckwith Bridge Plans
 - a. Existing Bridge - B1599-4755
 - b. New Bridge - 70053561-002 Rev 2(1)
27. Construction Traffic Management Plan - CTMP 16426-HYD-XX-XX-RP-TP-7002-P01
28. Email Re CTMP with County Highways Department
29. Supplementary LVIA Addendum - SEP21 and associated ZTVS, AVRs and VPs
30. PASSING BAY PLAN - WITH ACCOMPANYING STREET-VIEW IMAGES - 16426-HYD-XXXX-DR-TP-0001-P1.07
31. Passing Bay Plan - 16426-HYD-XX-XX-DR-TP-0002-P1.07
32. PROPOSED INDICATIVE LAYDOWN AREA WITH VEGETATION TRIMMING - 16426-HYDXX-XX-DR-TP-0003-P1.07
33. SWEPT PATH ANALYSIS AT LAY-DOWN AREA - 16.5M ARTICULATED VEHICLE - 16426HYD-XX-XX-DR-TP-0004-P1.07
34. SWEPT PATH ANALYSIS 16.5M ARTICULATED VEHICLE - 16426HYD-XX-XX-DR-TP-0001-P1.08
35. Street View - Passing Bays Site Visit Dims
36. TC22051 Brynwell Solar Photomontage 5
37. TC22051 Brynwell Solar VP9
38. Drainage Technical Note - 16470-HYD-XX-XX-TN-FR-0001
39. Email from VoG Ecologist dated 7th March 2022
40. 3261558 - Response to request for Further Information

Reason: For the avoidance of doubt as to the approved development and to accord with Circular 016/2014 on The Use of Planning Conditions for Development Management.

- 3) Within 41 years from the date when electricity is first exported, or within one year of the cessation of the generation of electricity from the site, the solar photovoltaic panels, frames, foundations, and all associated structures and fencing hereby permitted shall have been dismantled and removed from the site and the site restored in accordance with a scheme to be submitted to and approved in writing by the local planning authority. The developer shall notify the local planning authority in writing no later than five working days following the commencement of export of electricity and cessation of power production.

Reason: In the interests of visual amenity and to ensure compliance with Policies MD1, MD2 and MG17 of the Local Development Plan.

- 4) Prior to the commencement of development, a pre-construction condition survey (including of the highway verges and vegetation) should be carried out of the haulage and cabling route associated with the development, including details of the proposed reinstatement of the highway, and provided to the local planning authority for their approval in writing.

Reason: In the interests of highway safety in accordance with Policy MD2 of the Local Development Plan.

- 5) Within 3 months of completion of the development, a post construction condition survey, of the haulage and cabling route, informed by the details approved by condition 4, shall be carried out in accordance with a scheme to be submitted to and approved in writing by the local planning authority. The local planning authority will require the reinstatement of highway verges and vegetation and any remedial works identified in the approved scheme to be carried out within 6 months of the completion of the development hereby approved.

Reason: In the interests of highway safety in accordance with Policy MD2 of the Local Development Plan.

- 6) No construction work or deliveries associated with the development hereby approved shall take place on the site on any Sunday or Bank Holiday or on any other day except between the following hours: Monday to Friday 0800 – 1800, Saturday 0800 – 1300. Any piling associated with the development shall be limited to Monday to Friday between 09:00 and 17:00 hours.

Reason: In the interests of highway safety and to safeguard the amenities of residents, and to ensure compliance with the terms of Policy MD2 of the Local Development Plan.

- 7) No lighting shall be installed during the operation of the site as a solar photovoltaic facility.

Reason: In the interests of visual amenity and biodiversity interests and to ensure compliance with Policy MD1 & MD9 of the Local Development Plan.

- 8) Notwithstanding the submitted documents, prior to the commencement of development, a Construction Traffic Management Plan shall be submitted to and approved in writing with the local planning authority. The Construction Traffic Management Plan shall include details of the types of construction vehicles to be used, a route plan, survey work of Gower Lane to identify passing places, forward visibility envelopes, localised improvements, or convoying systems to facilitate the construction of the development and additional details of the provision and reinstatement post development of the laydown area and any temporary passing bays. The development shall thereafter be constructed in full accordance with the agreed Construction Traffic Management Plan.

Reason: In the interests of highway safety and having regard to the nature of the rural roads in accordance with Policies MD2 and MD7 of the Local Development Plan.

- 9) Notwithstanding the submitted details, no development shall commence, including any works of demolition or site clearance, until a Construction and Environment Management Plan (CEMP) has been submitted to, and approved in writing by, the local planning authority. The CEMP shall include the following details:

- a. the parking of vehicles of site operatives and visitors;
- b. site compound/laydown area to show appropriate provision for heavy goods vehicles and temporary improvements to the proposed vehicular access, which shall include details of any widening of the entrance and carriageway, and vision splays in both directions together with details of the reinstatement of the associated land, any hedgerow removal and proposed replacement;
- c. loading and unloading of plant and materials;
- d. storage of plant and materials used in constructing the development;
- e. the erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate;
- f. methods to avoid impacts to trees and their root protection areas and to avoid soil compaction;

- g. wheel washing facilities;
- h. measures to control and mitigate the emission of dust, smoke, other airborne pollutants and dirt during construction;
- i. a scheme for recycling/disposing of waste resulting from demolition and construction works;
- j. temporary lighting during the construction phase;
- k. management, control and mitigation of noise and vibration, ensuring that noise is kept to a minimum in accordance with BS 5228 - Code of practice for noise and vibration control on construction and open sites;
- l. odour management and mitigation;
- m. diesel and oil tank storage areas and bunds;
- n. the management of surface waters, including the protection of water courses and ground water; subsoil surface water drainage; bunding and siting of fuel storage areas; and emergency procedures and pollution response plans;
- o. measures to avoid and/or minimise risk of harm to protected species during site clearance and construction activities;
- p. methods for installing cabling through banks and hedgerows;
- q. details of post-construction restoration of the working areas including hedgerows and soil and natural features of the area.

The construction of the development shall be undertaken in full accordance with the approved CEMP.

Reason: To ensure that the construction of the development is undertaken in a neighbourly manner, to ensure management of surface waters and in the interests of the protection of amenity and the environment and to ensure compliance with the terms of Policies SP1 (Delivering the Strategy) and MD7 (Environmental Protection) of the Local Development Plan.

10) Notwithstanding the submitted details, no development shall commence until a Landscape and Environmental Management Plan (LEMP) has been submitted to and approved in writing by the local planning authority. The LEMP shall include details of the existing and proposed habitats, landscape, and ecological features at the site, scheduling and timings of activities and management plans:

- a. details of the hedgerow management regime;
- b. the species and sourcing of additional/replacement hedgerow planting;
- c. details of the seed mix for grassland habitat to be created and revised details of control of weeds including brambles;
- d. full details of the long-term management of hedgerows for the period of operation;
- e. a schedule of management activities, that takes account of good practice working periods;
- f. a review of the management activities within the LEMP every five years for the period of operation, informed by monitoring of condition of habitats;
- g. details of works pertaining to all trees on site.

The LEMP shall be carried out in accordance with the approved details and in accordance with the agreed timescale scheduling as detailed in the approved LEMP.

Reason: In the interests of safeguarding the ecology of the site and to ensure mitigation and enhancement of the ecological value of the site in accordance with Policy MD2 and MG17 of the Local Development Plan.

- 11) The level of noise emitted from the site shall not exceed 29dB during both the daytime and night-time periods as measured on the boundaries of the nearest dwelling.

Reason: To safeguard the living conditions of occupiers of neighbouring residential properties in accordance with Policies SP1 (Delivering the Strategy), MD2 (Design of New Development) and MD7 (Environmental Protection) of the Local Development Plan.

- 12) The battery storage container units, DNO Componentry and CCTV Columns hereby approved shall be finished in a dark green or dark brown colour.

Reason: To minimise landscape and visual impacts resulting from the scheme in accordance with Policies MD19 (Low Carbon and Renewable Energy Generation) and MG17 (Special Landscape Areas).

- 13) No development shall take place until the applicant, or their agents or successors in title, has secured agreement for a written scheme of historic environment mitigation which has been submitted by the applicant and approved by the local planning authority. Thereafter, the programme of work will be fully carried out in accordance with the requirements and standards of the written scheme.

Reason: To identify and record any features of archaeological interest discovered during the works, in order to mitigate the impact of the works on the archaeological resource.

- 14) Notwithstanding the submitted plans 16426-HYD-XX-XX-DR-TP-0001-P1.06 and 16426-HYD-XX-XXDR-TP-0002-P1.06, prior to the commencement of development, details of the proposed improvements to the adopted highway to provide passing bays shall be submitted to and approved in writing by the local planning authority. The details shall include locations, dimensions and construction details for the proposed passing bays and details of forward visibility envelopes, in addition to a suitable scheme of mitigation relating to the removal and replacement of any bank/hedgerow/vegetation to be lost as a result of the works (including a timetable for such works and any loss associated with the access to the proposed dropdown area). The passing bays shall thereafter be provided in accordance with the approved details, prior to the use of the lane by construction traffic associated with the development hereby approved and any mitigation undertaken in accordance with the agreed timescales.

Reason: in the interests of highway safety and to maintain free flow of traffic along the adopted highway.

- 15) No development shall take place until a report has been submitted to an approved in writing by the local planning authority detailing the structural integrity of Leckwith Bridge to withstand the installation of cabling associated with the development which shall be undertaken by a duly certified and competent structural/civil engineer. The report shall include details of the proposed cable to be installed along the adopted highway and across Leckwith Bridge, the cable voltage, type, size, weight, and calculations for loading on the bridge and installation method. The development shall be carried out in accordance with the approved details.

Reason: in the interests of highway safety.

ANNEX B: DOCUMENTS

Documents submitted by applicant after the application submission

- A1 Covering letter in response for additional information – September 2021
- A2 Response to formal request for additional information under Regulation 15(2) of the DNS (Wales Regulations - September 2021
- A3 Supplementary LVIA Addendum
- A4 Archaeology and Heritage Assessment Addendum
- A5 Revised Transport Statement
- A6 Revised Construction Management Plan
- A7 Flood Consequence Assessment
- A8 Site Selection Sequential Test
- A9 Zone of Theoretical Visibility ZTV 02 Screening from existing buildings & woodland
- A10 ZTV 01 Bare Earth scenario
- A11 ZTV 03 Cumulative ZTV with Woden Park Solar Farm
- A12 11 Viewpoint Photos (High Res)
- A13 Baseline viewpoints (AVR 01-05) and visualisation photomontages (VP1, VP2, VP4, VP6 and VP7)
- A14 Email with Vale of Glamorgan ecology comments
- A15 Email Re: CTMP with County Highways Department
- A16 Email from Vale of Glamorgan Re: Drainage and Planning Conditions
- A17 Street View - Passing Bays
- A18 Passing Bay Dimensions Plan
- A19 Existing Passing Bays Improvement Plan
- A20 Photos of position of noise monitoring equipment and google satellite image
- A21 Response to formal request for additional information under Regulation 15(2) of the DNS (Wales) Regulations - March 2022 and amended in April 2022
- A22 Ecological Impact Assessment March 2022
- A23 Email from Vale of Glamorgan Ecologist March 2022
- A22 Visualisation photomontage view 5
- A23 Additional viewpoint photograph 9
- A24 Technical Design Note on passing bays and visibility splays
- A25 Passing bays photographs March 2022

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A26 Swept path analysis for a 16.5m articulated vehicle

A27 Appendix B Proposed laydown area with vegetation trimming March 2022

A28 Appendix C Swept path analysis at the laydown area

A29 Appendix D Passing places plan with street view images March 2022

A30 Appendix E Dimensions of passing places plan March 2022

A31 Technical Design Note addressing flood maps for planning March 2022

A32 NRW Zone 2 and 3 sea flood map for planning March 2022

A33 NRW Zone 2 and 3 rivers flood map for planning March 2022

A34 NRW DAM Zone C1 map

Note: Docs A1-A20 above comprise 'September 2021 Bundle' of Additional Information

Note: Docs A21-A34 above comprise 'March 2022 Bundle' of Additional Information

Documents submitted by interested parties after initial application consultation and publicity period

Response to Applicant's September 2021 Bundle

IP1 Vale of Glamorgan Council extracts of LDP policies, constraints/proposals maps, SLA plan, and SPG documents

IP2 Cardiff LDP Front Cover

IP3 Vale of Glamorgan responses to the additional information (September 2021 bundle) from Planning, Ecology, Landscape Architect and Highways

IP4 Local Residents and Councillors

IP5 CADW

IP6 NRW

IP7 Michaelston-le-Pit and Leckwith CC

Response to Applicant's March 2022 Bundle

IP8 Vale of Glamorgan response to the additional information (March 2022 bundle)

IP9 Local Resident

IP10 NRW