



Craig Y Perthi Solar Farm Resubmission

Design and Access Statement

Prepared for

RWE

RWE Renewables UK

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FIGURES

Figure 1 – Location Plan

Figure 2 – Site Layout



1.0 INTRODUCTION

- 1.1.1 This Design and Access Statement ('DAS') has been prepared in support of an application for a solar photovoltaic electricity generating station and associated infrastructure ('the Proposed Development') on land to the east of Newport, near Craig Y Perthi Wood and the village of Bishton ('the Site'). The DAS has been prepared for RWE Renewables UK ('the Applicant').
- 1.1.2 The Proposed Development would constitute a Development of National Significance ('DNS') as it relates to an electricity generating station with an installed generating capacity of between 10 MW and 350 MW. The application would therefore be submitted to Planning and Environment Decisions Wales ('PEDW') for determination by the Welsh Ministers.
- 1.1.3 The Proposed Development represents a revised form of the Craig Y Perthi Solar Farm submitted as a DNS application in April 2024. Following the refusal of that application in October 2025, the scheme has been reviewed in response to the matters identified during its examination and determination. The revised design reduces the Site area, avoids direct development within the Gwent Levels – Redwick and Llandeenny Site of Special Scientific Interest, removes the previously proposed battery energy storage and central inverter infrastructure, and refines the landscape and ecological proposals.
- 1.1.4 This DAS explains how the Proposed Development has evolved through consideration of the Site and its surroundings, environmental assessment, consultation and the findings of the previous DNS examination. It describes the principal design considerations and how these have informed the scale, layout and appearance of the revised scheme.
- 1.1.5 The DAS also considers character, access, movement, environmental sustainability, green infrastructure and community safety, together with the proposed arrangements for construction, operation and decommissioning.
- 1.1.6 This DAS has been prepared in accordance with the applicable requirements for Design and Access Statements in Wales and with regard to relevant Welsh Government guidance on design, placemaking and transport.



2.0 SUMMARY OF THE PROPOSAL

2.1 Site Location

- 2.1.1 The location of the Proposed Development is shown on Figure 1.
- 2.1.2 The Site, including the solar generating infrastructure, access tracks, landscaping and ecological enhancement areas, extends to approximately 196 ha and is currently used as part of several pastoral and arable agricultural holdings, principally associated with Castle Farm. The area enclosed by fencing and containing solar panels and ancillary infrastructure would be approximately 111 ha.
- 2.1.3 The Site is located approximately 4 km east of Newport, between the M4 motorway to the north and the South Wales Main Line railway to the south. Agricultural fields and woodland associated with Llanwern Park lie to the north and northwest, with further agricultural land extending eastwards towards Wilcrick and the Magor Brewery.
- 2.1.4 Although the Site is predominantly agricultural and retains a rural character, it lies within a wider landscape strongly influenced by urban and industrial development. Llanwern Steelworks and the developing Glan Llyn urban expansion area are located to the south and southwest, while Magor Brewery and the Gwent Europark distribution and logistics facilities are located to the east and southeast. Existing and consented wind turbines also form prominent features within the surrounding landscape.
- 2.1.5 The village of Bishton lies within the central southern part of the wider Site area. The Proposed Development retains undeveloped fields around the village, including a minimum separation of approximately 75 m between the nearest solar infrastructure and residential properties to the east.
- 2.1.6 The Site comprises a network of medium to large agricultural fields, generally enclosed by established hedgerows, trees, woodland and drainage features. Its southern boundary is formed by a combination of the South Wales Main Line railway, Bishton Road and the minor road between Bishton and Wilcrick.
- 2.1.7 The Gwent Levels – Redwick and Llandeenny Site of Special Scientific Interest ('SSSI') lies adjacent to the southeastern part of the Site. In contrast to the 2024



Scheme, no part of the SSSI is included within the revised Site and no development is proposed within it.

2.1.8 The Proposed Development would connect to the Grid Supply Point at Uskmouth Power Station through an underground cable route of approximately 10 km. The cable would principally be installed within the existing highway boundary. Towards Uskmouth, the route would pass adjacent to and within the Gwent Levels – Nash and Goldcliff SSSI and adjacent to a short section of the Newport Wetlands SSSI.

2.1.9 There are no statutory environmental designations within the Site. However, several designated heritage assets lie nearby, including Bishton Castle Scheduled Monument, Wilcrick Hill Camp Scheduled Monument and the earthworks of a deserted medieval settlement northwest of Wilcrick Hill.

2.2 The Proposed Development

2.2.1 The Applicant is seeking planning consent for the installation and operation of a renewable electricity generating station comprising ground-mounted photovoltaic solar arrays and associated infrastructure. The Proposed Development would have a maximum export capacity of approximately 99.9 MW and would connect to the National Grid at Uskmouth Power Station through underground cabling. The revised scheme is solar-led and does not include the battery energy storage system or central inverter infrastructure proposed as part of the 2024 Scheme.

2.2.2 The Proposed Development would generate sufficient renewable electricity to meet the equivalent annual needs of approximately 42,077 Welsh homes and is estimated to displace approximately 2.8 million tonnes of carbon dioxide over its operational life.

2.2.3 The main components of the Proposed Development are:

- i) photovoltaic solar panels, support frames, string inverters and associated transformers;
- ii) an onsite 132 kV substation, switchgear and control buildings and associated electrical infrastructure;
- iii) underground electrical cabling within the Site and to the Grid Supply Point at Uskmouth Power Station;
- iv) approximately 7.8 km of access tracks, using existing farm entrances, tracks and field gates wherever practicable;

- v) wooden post deer and stock fencing incorporating mammal gates, access gates and inward-facing infrared CCTV cameras;
- vi) approximately 5 km of enhanced Public Rights of Way and green lanes, together with approximately 3.3 km of new permissive paths;
- vii) more than 11 km of new native hedgerow and tree planting, enhancement of existing hedgerows, areas of woodland planting and a community orchard;
- viii) approximately 43.3 ha of diverse wildflower meadow, including planting suitable for shrill carder bee;
- ix) approximately 16.5 ha of dedicated lapwing nesting habitat, protected by predator fencing; and
- x) further ecological enhancements, including bird and bat boxes, bee and insect hotels, reptile hibernacula and log piles.

2.2.4 The Proposed Development is presented on Figure 2, which shows the proposed site layout.

2.3 Construction

2.3.1 The timing of construction would depend on the grant of planning permission, subsequent contract negotiations and prevailing weather and ground conditions. The exact construction methods, phasing and programme would be determined by the appointed designers and contractors.

2.3.2 Construction is anticipated to take approximately 36 to 52 weeks, including testing and commissioning.

2.3.3 The principal construction activities would comprise:

- i) installation of temporary fencing around tree root protection areas and active construction areas;
- ii) establishment of temporary construction compounds;
- iii) construction and improvement of access tracks;
- iv) erection of deer and stock fencing and access gates;
- v) installation of solar panels, support frames, string inverters and transformers;
- vi) installation of CCTV poles and cameras;
- vii) excavation and installation of cable trenches;
- viii) construction of the control, switchgear and substation infrastructure;
- ix) installation of the grid connection;



- x) cultivation, seeding and planting; and
- xi) final landscaping and installation of ecological enhancements.

Site Access and Compounds

- 2.3.4 The Site is located within a predominantly rural area served by local roads appropriate to its agricultural setting. The construction strategy has therefore been designed to minimise the number of HGVs travelling along the local highway network and through Bishton.
- 2.3.5 Principal construction compounds would be established north of Bishton, close to the existing Castle Farm accesses. These would act as the main receiving points for HGV deliveries and would be supported by smaller satellite compounds serving different parts of the Site. Their locations are shown on Image 2.1..

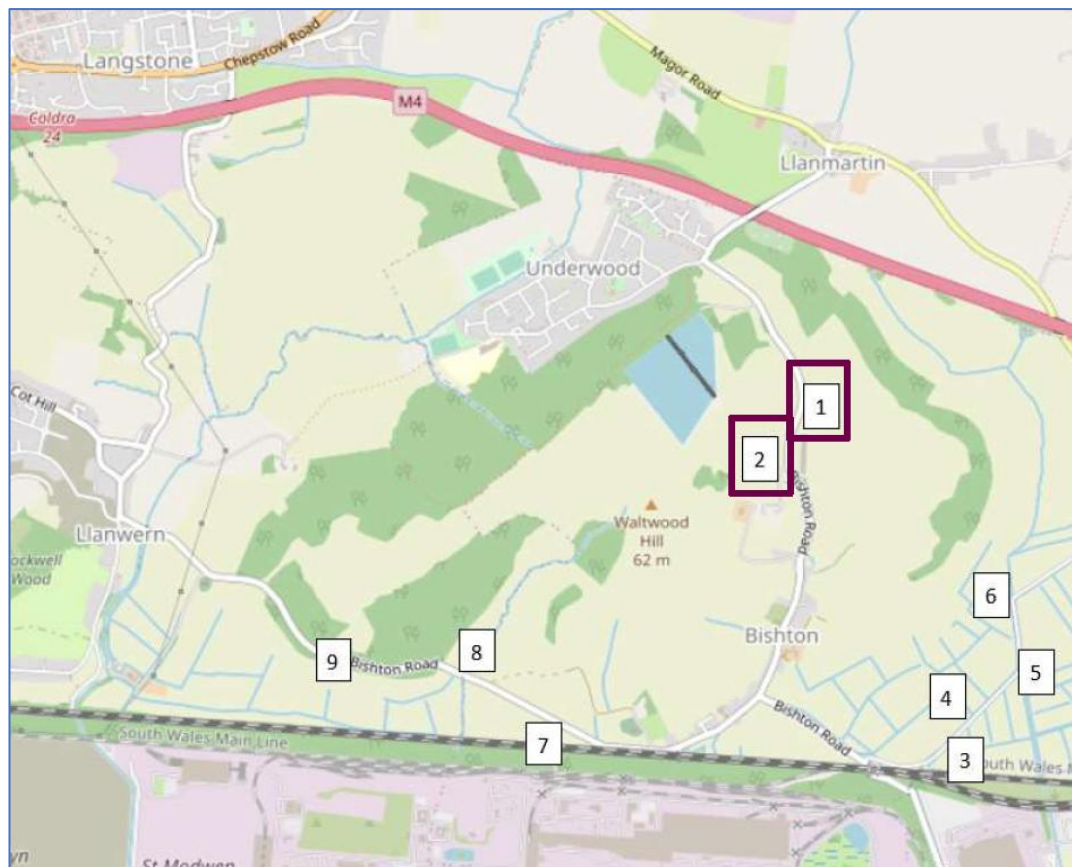


Image 2.1 Location of access points for main construction compounds

- 2.3.6 The compounds are located to the east and west of Bishton Road, access to each central compound would be promoted via existing accesses, the first currently serving the egg factory, the second serving Castle Farm Dairy. Compounds would

typically measure 75m in length and 75m in width. A 'Durabase Mat System' or a similar non-ground penetrating mat system would be used within the compounds.

2.3.7 An indication of a typical site compound layout is shown below in Wherever practicable, materials would be transferred from the principal compounds to the satellite compounds and individual construction areas by tractor and trailer using internal routes across the Site. This would reduce the need for HGVs to travel between separate land parcels on local roads.

2.3.8 The principal compounds would typically measure approximately 75 m by 75 m and would be formed using a temporary non-ground-penetrating mat system, or similar construction. An indicative compound arrangement is shown on Image 2.2.

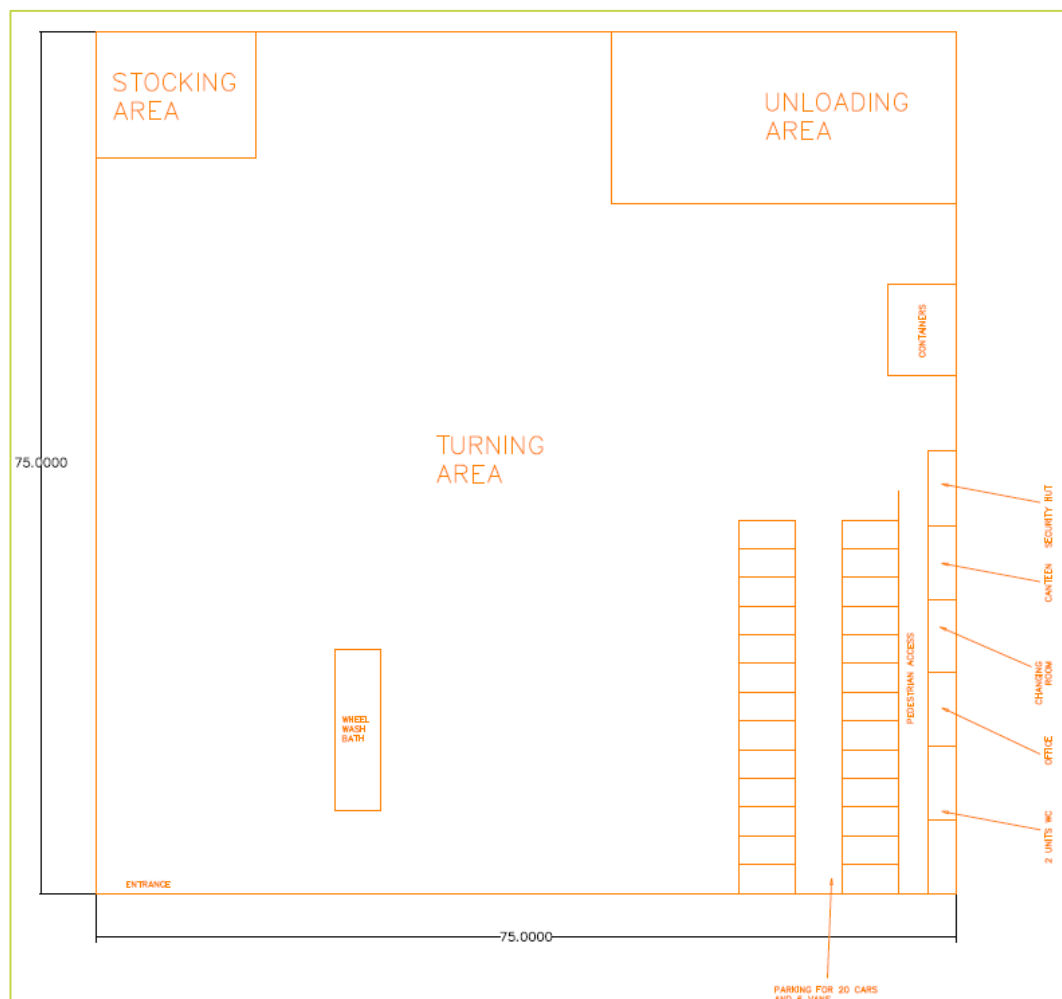


Image 2.2 Typical construction compound layout

2.3.9 The temporary compounds would accommodate site offices and welfare facilities, construction-worker parking, delivery turning and unloading areas, wheel-washing

facilities, plant and material storage, fuel and chemical stores and designated waste-storage areas.

- 2.3.10 Active construction areas would be secured and closed to unauthorised public access. Appropriate fencing, warning signs, site-security arrangements and traffic marshals would be used to protect construction workers, Public Rights of Way users and other members of the public.
- 2.3.11 Construction deliveries would be managed through a booking system and would follow the routes and control measures established through the Construction Traffic Management Plan. Construction workers would be encouraged to car share or use contractor-provided minibuses, particularly during periods of peak activity.
- 2.3.12 Following completion of construction, the temporary compounds and associated facilities would be removed and the affected areas restored to grassland or incorporated into the proposed landscape and ecological areas.

Construction Plant

- 2.3.13 Plant on Site would be likely to comprise:
 - i) A number of small-scale mechanical pile driving rigs for frame supports.
 - ii) 360° excavators.
 - iii) Dumper trucks and rollers for access tracks.
 - iv) Trenching machines.
 - v) Telehandlers.
 - vi) Cranes for transformers and Battery Energy Storage System and inverter containers.
- 2.3.14 Construction activities would be managed through a Construction Environmental Management Plan and Construction Traffic Management Plan. These would establish the detailed controls for matters including working hours, traffic movements, noise, dust, pollution prevention, waste, ecological protection and liaison with the local community.

2.4 Main Construction Works

- 2.4.1 The principal construction methods are described below. The precise sequence, phasing and methods would be confirmed by the appointed contractor and controlled through the Construction Environmental Management Plan.



Site Preparation

- 2.4.2 Before the main construction works commence, temporary fencing would be installed around construction compounds, tree root protection areas and other sensitive features. The permanent deer and stock fencing would then be erected progressively to secure active construction areas.
- 2.4.3 Temporary construction compounds would be established to provide site offices, welfare facilities and areas for the storage of plant, materials, fuel and waste. Refuelling and chemical-storage areas would be appropriately contained and managed in accordance with relevant pollution-prevention requirements.

Earthworks and Excavations

- 2.4.4 Earthworks would be limited principally to the construction of access tracks, equipment foundations and cable trenches. Topsoil excavated during these works would be retained on the Site and reused in restoration or landscaping wherever practicable.
- 2.4.5 Temporary excavations would primarily comprise trenches for electrical, communications and security cabling. Topsoil and subsoil would be stored separately beside the excavation and reinstated in the correct sequence as soon as practicable following installation.
- 2.4.6 Cable trenches would generally be located beside access tracks and fence lines to facilitate maintenance and minimise disturbance. In areas of archaeological sensitivity, alternative installation methods, including surface-mounted cable containment, may be used where appropriate.

Foundations and Equipment Installation

- 2.4.7 The transformers, substation, switchgear and control infrastructure would be supported on concrete slabs, sleepers or other suitable foundations determined through detailed design and ground investigation. Concrete would be delivered to the Site by mixer lorry and placed directly within the prepared foundation areas.
- 2.4.8 The solar-panel support posts would generally be ram-driven into the ground using small-scale, GPS-controlled piling rigs. The posts would typically extend approximately 1 m to 2 m below ground level, depending on local ground conditions.



- 2.4.9 The remainder of each support frame would be fitted to the installed posts before the photovoltaic modules were secured in place. Where ground conditions, utilities or archaeological constraints prevent driven piling, alternative surface-mounted foundations may be used.
- 2.4.10 String inverters, transformers and other electrical equipment would be installed progressively as the solar arrays are completed. Cranes or telehandlers would be used where necessary to position larger items of equipment.

Grid Connection

- 2.4.11 The grid-connection cable would be installed underground, principally within the existing highway boundary, between the Site and Uskmouth Power Station. Cable ducts would be placed within excavated trenches, surrounded by suitable bedding material and backfilled before the highway surface was reinstated.
- 2.4.12 Local traffic-management measures, including temporary diversions or short-duration road closures, may be required during the grid-connection works. These would be agreed with the relevant highway authority and managed through the Construction Traffic Management Plan.

Lighting and Working Hours

- 2.4.13 Temporary construction lighting would only be used where required for health, safety and security during periods of darkness, low natural light or specific construction activities. Lighting would be directed towards the working area and designed to minimise glare, light spill and effects on nearby properties and ecological receptors.
- 2.4.14 Construction would generally take place between 08:00 and 18:00 Monday to Friday and between 08:00 and 13:00 on Saturdays, with no routine construction on Sundays or Bank Holidays. Piling would be restricted to between 08:00 and 17:00 Monday to Friday.
- 2.4.15 This retains the purpose and sequence of the original Section 2.4, but removes obsolete references to BESS foundations and containers and introduces the grid-connection works, which were not properly covered in the former section.



2.5 Operation

- 2.5.1 Once operational, the Proposed Development would be monitored remotely and would not be permanently staffed. Access would be limited principally to routine inspection, maintenance and landscape-management activities, typically undertaken using a small van or similar vehicle.
- 2.5.2 Occasional larger-scale maintenance may require additional personnel and specialist equipment, such as cranes or low loaders, for the replacement of transformers or other electrical infrastructure. Such activities would be infrequent.
- 2.5.3 Operational noise would arise principally from the string inverters, transformers and substation equipment. The layout and specification of this infrastructure have been informed by noise assessment, with predicted noise levels at nearby sensitive receptors remaining below existing background levels.
- 2.5.4 No continuous operational lighting would be required. Low-level lighting would be limited to the switchgear, control and substation buildings and would only be activated when required for maintenance, security or emergency purposes.
- 2.5.5 The principal use of the Site during operation would be renewable electricity generation. The spacing and height of the solar arrays would allow continued agricultural management beneath and between the panels, including sheep grazing and, where appropriate, other low-intensity agricultural uses. Periodic mowing and landscape management would also be undertaken, allowing most of the Site to remain in productive agricultural use.

2.6 Decommissioning

- 2.6.1 The Proposed Development would operate for a period of approximately 40 years. At the end of this period, it would be decommissioned and the Site restored to agricultural use, unless consent were obtained for its continued operation or replacement.
- 2.6.2 Decommissioning would involve the removal of the solar panels, support frames, inverters, transformers, fencing, CCTV equipment, cabling and associated infrastructure. The works would require plant and vehicle movements broadly similar to those associated with construction and would be managed through an agreed Decommissioning Environmental Management Plan.



- 2.6.3 The onsite substation and its associated access track may be retained where required by the Distribution Network Operator. Any continued use of this infrastructure would be subject to the necessary planning and regulatory approvals.
- 2.6.4 Materials would be reused or recycled wherever practicable. Solar panels contain high proportions of recyclable glass, aluminium and other metals, while the support frames, cabling, fencing and electrical equipment would also be suitable for recovery or recycling.
- 2.6.5 The limited extent of permanent ground disturbance means that restoration works would be relatively minor. Foundations, cabling and other below-ground infrastructure would be removed where appropriate, soils reinstated and the land returned to full agricultural use.



3.0 THE BRIEF AND VISION

- 3.1.1 The Applicant's brief is to deliver a nationally significant solar farm capable of making a meaningful contribution to renewable electricity generation in Wales, while responding carefully to the environmental characteristics of the Site and its surroundings.
- 3.1.2 The vision for the Proposed Development is to create a well-integrated, landscaped solar farm that avoids direct development within the Gwent Levels – Redwick and Llandeenny SSSI, retains the established pattern of fields, hedgerows and woodland, and protects the setting of nearby communities and heritage assets.
- 3.1.3 The revised design seeks to balance efficient renewable energy generation with a reduced and simplified development footprint. The removal of the previously proposed battery storage and central inverter infrastructure, together with the reduction in the overall Site area, has allowed the scheme to respond more directly to the sensitivities identified through the previous application and examination.
- 3.1.4 The Proposed Development would also deliver substantial landscape, ecological and recreational benefits. These include extensive native hedgerow and tree planting, woodland and wildflower habitat creation, dedicated lapwing mitigation land, improvements to existing Public Rights of Way and the provision of new permissive paths.
- 3.1.5 The scheme is expected to generate sufficient renewable electricity to meet the equivalent annual needs of approximately 42,077 Welsh homes and to displace approximately 2.8 million tonnes of carbon dioxide over its operational life. It would therefore contribute to the transition to a lower-carbon energy system, while allowing most of the Site to remain in agricultural and ecological management.



4.0 SITE AND CONTEXT ANALYSIS

- 4.1.1 The Proposed Development has been designed to respond to the characteristics of the Site and its surroundings, including its landscape and historic character, ecological sensitivities, existing agricultural use, nearby communities and the physical constraints that influence the layout.
- 4.1.2 The location of the Site is strongly influenced by the identified Grid Supply Point at Uskmouth Power Station. Solar farms of this scale must be located sufficiently close to an available grid connection to remain technically and commercially viable, while also avoiding unnecessary cabling, electrical losses and effects on third-party land. The Site provides sufficient land to accommodate the Proposed Development and connect to the Grid Supply Point through underground cabling principally within the existing highway boundary.
- 4.1.3 Environmental and technical review has identified the principal features that have informed the design of the Proposed Development:
- i) the established pattern of agricultural fields, hedgerows, trees, woodland, reens and drainage ditches across the Site;
 - ii) the Gwent Levels – Redwick and Llandeenny Site of Special Scientific Interest ('SSSI'), which lies adjacent to the southeastern part of the Site;
 - iii) the landscape character of Llanwern Park and Wilcrick Moor, including the transition between the gently undulating landscape to the north and the lower-lying levels landscape to the south;
 - iv) nearby ancient woodland and Llanwern Park Registered Park and Garden;
 - v) nearby designated heritage assets, including Bishton Castle, Wilcrick Hill Camp, the deserted medieval settlement northwest of Wilcrick Hill and St Cadwaladr's Church;
 - vi) the village of Bishton and other nearby residential properties;
 - vii) the network of Public Rights of Way, green lanes and existing farm accesses crossing the Site;
 - viii) areas susceptible to flooding and the network of reens, ditches and watercourses; and
 - ix) the relationship of the Site with the M4 motorway, South Wales Main Line railway and surrounding urban and industrial development.

- 4.1.4 The Site falls gradually from the higher ground near Waltwood Hill in the north towards the lower-lying land beside the South Wales Main Line railway. Existing woodland, hedgerows and field-boundary trees provide a degree of visual containment, although the lower and more open parts of the Site retain characteristics associated with the Gwent Levels landscape. The retention and strengthening of this established landscape framework have therefore been important design considerations.
- 4.1.5 The revised Site does not include any part of the Gwent Levels – Redwick and Llandeenny SSSI. The southeastern area included within the 2024 Scheme has been removed, ensuring that no solar infrastructure or associated construction activity is proposed within the designated site. Appropriate buffers have also been incorporated from reens, ditches, woodland, hedgerows and important trees.
- 4.1.6 Although solar panels are raised above ground level and are not generally vulnerable to localised surface-water flooding, electrical infrastructure may be more sensitive. The substation, switchgear and other critical infrastructure have therefore been located outside areas identified as being at material risk of flooding and would be raised on suitable foundations where required.
- 4.1.7 The layout has also been informed by the relationship between the Site and nearby communities and heritage assets. Undeveloped areas have been retained around Bishton and St Cadwaladr's Church, while the solar arrays have been arranged within the existing field pattern to limit changes to landscape character and views. Existing farm accesses, tracks and field gates would be used wherever practicable to reduce the loss of hedgerows and trees.
- 4.1.8 These constraints also provide opportunities to strengthen the environmental framework of the Site. The Proposed Development incorporates new and enhanced hedgerows, woodland and tree planting, wildflower meadows, dedicated lapwing habitat, improved Public Rights of Way and new permissive routes. These measures form an integral part of the design and are illustrated on the proposed Site Layout and Illustrative Landscape Masterplan.
- 4.1.9 This keeps Section 4 focused on the site characteristics, constraints and opportunities. The explanation of precisely how the layout changed in response to them can then follow in Sections 5 and 6, avoiding too much repetition.



5.0 DESIGN CONCEPT AND INTERPRETATION

5.1.1 The analysis of the Site and its surroundings has informed a landscape-led design concept that seeks to integrate renewable energy generation within the established agricultural landscape. The concept retains the existing field pattern and landscape framework, avoids the most sensitive areas and uses planting, habitat creation and improved public access as integral parts of the Proposed Development.

5.1.2 Image 5.1 illustrates the principal elements of the design concept, which comprise:

- i) locating the solar arrays within existing field parcels and avoiding any development within the Gwent Levels – Redwick and Llandeenny SSSI;
- ii) retaining undeveloped areas and substantial setbacks around Bishton, nearby heritage assets, woodland, important trees, reens and drainage features;
- iii) retaining and enhancing existing hedgerows, trees and woodland, supported by more than 11 km of new native hedgerow and tree planting;
- iv) providing approximately 43.3 ha of diverse wildflower meadow and approximately 16.5 ha of dedicated lapwing nesting habitat;
- v) retaining agricultural management across much of the Site, including grazing beneath and between the solar arrays;
- vi) using existing farm entrances, tracks and field gates wherever practicable to minimise changes to the established landscape framework; and
- vii) improving approximately 5 km of existing Public Rights of Way and green lanes and providing approximately 3.3 km of new permissive paths, supported by accessible gates, wildflower margins, seating, signage and interpretation.

5.1.3 Together, these measures establish a more compact and simplified solar-led development, integrated within a strengthened network of landscape, ecological and recreational green infrastructure. The way in which this concept has evolved into the final design is described in Section 6.0.



Image 5.1 Concept Plan



6.0 DESIGN EVOLUTION AND DEVELOPMENT

6.1 Initial Design Principles

- 6.1.1 The design of Craig Y Perthi Solar Farm has developed through an iterative process of environmental assessment, technical review and consultation. From the outset, the objective was to accommodate a nationally significant solar development while responding to the established landscape, ecological and historic character of the Site and its surroundings.
- 6.1.2 The location and broad extent of the Site were influenced by the availability of a technically and commercially viable connection to the Grid Supply Point at Uskmouth Power Station. Within this broad area, the design process sought to identify land capable of accommodating solar development while retaining the established agricultural and landscape framework.
- 6.1.3 Initial environmental and technical review identified the principal opportunities and constraints influencing the layout, including:
- i) the existing pattern of fields, hedgerows, woodland, trees, reens and drainage ditches;
 - ii) the relationship with Bishton and nearby residential properties;
 - iii) the setting of Bishton Castle, St Cadwaladr's Church, Wilcrick Hill Camp and other heritage assets;
 - iv) the landscape character of Llanwern Park, Wilcrick Moor and the Gwent Levels;
 - v) areas susceptible to surface-water flooding;
 - vi) existing Public Rights of Way, farm accesses and tracks;
 - vii) agricultural land quality; and
 - viii) the potential for effects associated with noise, glint and glare and construction traffic.
- 6.1.4 These considerations established the following initial design principles:
- i) retaining the established field pattern and existing hedgerows, trees and woodland wherever practicable;
 - ii) using existing farm entrances, tracks, field gates and hedgerow openings to minimise vegetation loss;



- iii) retaining the existing landform by mounting the solar arrays on driven posts rather than undertaking extensive earthworks;
- iv) maintaining suitable buffers from hedgerows, woodland, important trees, reens and drainage features;
- v) locating electrical infrastructure away from nearby residential properties and areas at material risk of flooding; and
- vi) allowing agricultural management to continue beneath and between the solar arrays.

6.1.5 A preliminary layout was developed and reviewed by specialists in landscape and visual impact, cultural heritage, ecology, arboriculture, noise, glint and glare, agricultural soils, drainage and transport. The findings of these assessments were progressively incorporated into the design rather than being treated solely as mitigation following completion of the layout.

6.2 Development of the 2024 Scheme

6.2.1 The specialist review resulted in a series of changes to the emerging 2024 Scheme. Fields close to Bishton, St Cadwaladr's Church, Wilcrick Hill and Llanwern Park were removed from the developable area to reduce effects on local views, landscape character and the setting of heritage assets.

6.2.2 Existing hedgerows and trees were retained wherever practicable, with additional buffers introduced around important and potentially veteran trees. The access-track network was also refined to follow existing farm routes and field openings, reducing the need to remove established vegetation.

6.2.3 Potential glint and glare effects on nearby residential properties and users of the M4 and B4245 were considered through the orientation of the solar arrays and the provision of additional landscape screening. The location of the main operational infrastructure was also informed by flood risk and the need to maximise separation from nearby residential properties.

6.2.4 Landscape mitigation was developed as an integral part of the scheme. This included strengthening existing field boundaries, introducing new native hedgerow and tree planting, retaining substantial undeveloped areas around Bishton and creating wider, landscaped corridors along Public Rights of Way. These measures also provided opportunities for habitat connectivity and wider biodiversity enhancement.



- 6.2.5 The resulting 2024 Scheme extended to approximately 240 ha, of which around 135 ha would have been enclosed and occupied by solar panels and associated infrastructure. It included co-located battery energy storage and central inverter infrastructure, together with approximately 12 ha of dedicated lapwing habitat. Part of the southeastern extent of the application site was located within the Gwent Levels – Redwick and Llandeenny Site of Special Scientific Interest ('SSSI').

6.3 Previous DNS Examination

- 6.3.1 The Previous Application was submitted in April 2024 and subsequently examined by an Inspector appointed by the Welsh Ministers. Hearings were held in March 2025, followed by an accompanied site visit in April 2025.

- 6.3.2 The examination considered the environmental effects and benefits of the scheme in detail. Particular concerns were identified in relation to:

- i) the inclusion of development within the Gwent Levels SSSI and the application of the step-wise approach to avoiding ecological harm;
- ii) potential effects on protected and priority species, including lapwing and shrill carder bee;
- iii) changes to landscape character and views, particularly those experienced by users of Public Rights of Way; and
- iv) effects on the setting of nearby historic assets.

- 6.3.3 Although significant weight was afforded to the renewable-energy, climate-change and economic benefits of the development, the Inspector concluded that these did not outweigh the identified environmental harm. The Welsh Ministers accepted the Inspector's recommendation and refused planning permission in October 2025.

- 6.3.4 The examination and decision provided a clear basis for reconsidering the design. The revised design process therefore began with a review of whether the identified effects could be avoided through changes to the extent, composition and layout of the development, rather than relying principally on additional mitigation.

6.4 Evolution of the Revised Scheme

- 6.4.1 The principal response has been to remove the southeastern part of the 2024 Scheme. This reduces the overall Site area by approximately 44 ha, from around



- 240 ha to 196 ha, and reduces the fenced and panelled area from approximately 135 ha to 111 ha.
- 6.4.2 This change completely removes solar panels and associated infrastructure from the Gwent Levels – Redwick and Llandeenny SSSI. No part of the SSSI is now included within the revised Site, thereby avoiding direct development within the designated area and applying the first stage of the step-wise approach.
- 6.4.3 The reduced southeastern extent also limits the spread of development into the lower-lying and more open landscape associated with the Gwent Levels. It removes development from the area in which buried peat deposits were previously identified and reduces the extent of infrastructure close to the associated reën and ditch network.
- 6.4.4 The proposed lapwing habitat has been increased from approximately 12 ha to 16.5 ha. Two additional contiguous fields have been incorporated to create a larger and more coherent area of suitable open habitat, which would be managed specifically for nesting lapwing and protected through appropriate predator-control fencing.
- 6.4.5 Approximately 43.3 ha of diverse wildflower meadow would also be created across the Site, including areas enhanced with suitable food plants for shrill carder bee. These areas would be connected through the retained and enhanced network of field boundaries, woodland, reens, ditches and grassland corridors.
- 6.4.6 The battery energy storage system and central inverter infrastructure included within the 2024 Scheme have been removed. The revised scheme would instead use string inverters associated with the solar-panel rows. This substantially reduces the amount of containerised infrastructure and simplifies the operational character of the Proposed Development.
- 6.4.7 The removal of the battery infrastructure also reduces the range of potential effects associated with operational noise, fire risk and the concentration of semi-industrial equipment within the rural landscape. Improvements in solar-panel efficiency and string-inverter technology since the preparation of the Previous Application have enabled these changes to be made while retaining a viable nationally significant renewable-energy scheme.
- 6.4.8 The more compact layout continues to retain substantial undeveloped areas around Bishton and nearby historic assets. Solar arrays remain arranged within the



established field pattern, while existing hedgerows, trees and woodland would be retained and strengthened through new native planting.

- 6.4.9 The network of Public Rights of Way and proposed permissive paths has been incorporated as part of the green infrastructure framework. Approximately 5 km of existing routes would be enhanced and approximately 3.3 km of new permissive paths would be provided, creating wider landscaped corridors through and around the solar-development areas.
- 6.4.10 The locations of the substation, switchgear, transformers, access tracks and other infrastructure have been reviewed against flood risk, residential amenity, landscape, heritage, ecology and arboricultural constraints. Appropriate buffers would be retained from woodland, important trees, hedgerows, reens and ditches, while existing accesses and field openings would continue to be used wherever practicable.
- 6.4.11 The revised layout has therefore not simply removed the southeastern fields from the 2024 Scheme. It has reconsidered the composition and environmental framework of the development as a whole, resulting in a smaller, simpler and more strongly landscape-led proposal.

6.5 The Final Design Response

- 6.5.1 The final design represents the outcome of the original site-selection and environmental-assessment process, together with the matters identified through the examination of the Previous Application. It retains the underlying advantages of the Site while responding directly to its most sensitive ecological, landscape and historic characteristics.
- 6.5.2 In particular, the revised Proposed Development:
- i) avoids all direct development within the Gwent Levels – Redwick and Llandeenny SSSI;
 - ii) reduces the overall Site and panelled areas;
 - iii) removes the battery energy storage and central inverter infrastructure;
 - iv) increases and consolidates the dedicated lapwing habitat;
 - v) provides substantial wildflower, hedgerow, tree and woodland creation;
 - vi) retains the established field pattern and the majority of existing landscape features;

- vii) maintains separation from Bishton and nearby heritage assets; and
- viii) incorporates improved Public Rights of Way and new permissive recreational routes.

6.5.3 The Proposed Site Layout and Illustrative Landscape Masterplan show how the solar generating infrastructure would sit within this wider framework of retained agricultural land, habitat creation, landscape planting and public access. The resulting scheme is materially different from the 2024 Scheme and provides a clearer application of avoidance and integrated environmental design.

7.0 THE PROPOSED DEVELOPMENT

7.1 Introduction

7.1.1 This section explains how the final design of the Proposed Development responds to the objectives of good design identified in Technical Advice Note 12: Design. It should be read alongside the proposed Site Layout at Figure 2 and the Illustrative Landscape Masterplan at Image 5.1.

7.1.2 The design has been informed by the Site and context analysis, environmental assessment, consultation and the findings of the examination of the Previous Application. It seeks to integrate the solar generating infrastructure within the existing agricultural landscape while delivering a connected framework of landscape, ecological and recreational green infrastructure.

7.2 Character

7.2.1 The Proposed Development has been designed to respond to the established character of the Site, which comprises agricultural fields enclosed by hedgerows, trees, woodland, reens and drainage ditches. Solar arrays would be accommodated within the existing field parcels, allowing the underlying landscape pattern and landform to remain legible.

7.2.2 The revised scheme is smaller and more compact than the 2024 Scheme. The southeastern part of the previous layout has been removed, avoiding direct development within the Gwent Levels – Redwick and Llandeenny SSSI and limiting the spread of solar infrastructure into the lower-lying and more open Levels landscape.

7.2.3 The removal of the previously proposed battery energy storage and central inverter infrastructure has simplified the character of the development and reduced the concentration of containerised equipment. The remaining operational infrastructure would be grouped within carefully selected locations and finished in recessive colours appropriate to the surrounding landscape.

7.2.4 The solar arrays would be low in height and arranged in regular rows that respond to the shape and orientation of individual fields. Existing land levels would generally be retained, with support posts driven directly into the ground to avoid extensive earthworks and changes to the established landform.



- 7.2.5 Existing hedgerows, trees and woodland would be retained and reinforced through new native planting. This would strengthen the field-boundary network, filter views of the solar infrastructure and help integrate the development with the surrounding landscape as the planting matures.
- 7.2.6 Substantial undeveloped areas would be retained around Bishton, St Cadwaladr's Church and other nearby heritage assets. These areas, together with new planting and habitat creation, would help maintain a sense of separation between the village, historic features and the solar-development areas.
- 7.2.7 Agricultural management would continue across much of the Site, including grazing beneath and between the solar arrays. The Proposed Development would therefore introduce renewable-energy generation without permanently replacing the underlying agricultural character and use of most of the land.

7.3 Access

- 7.3.1 Construction access would be taken from the north using the established route from the M4 and B4245 via Waltwood Road and Bishton Road. This provides access from the strategic highway network and avoids the more constrained highway routes to the west of the Site.
- 7.3.2 Principal construction compounds would be established close to the existing Castle Farm accesses north of Bishton. Materials would then be transferred to satellite compounds and individual construction areas using internal routes wherever practicable, reducing the need for HGVs to travel between separate parts of the Site using local roads.
- 7.3.3 The layout makes use of existing farm entrances, tracks, field gates and gaps in hedgerows wherever practicable. New permanent access tracks would be limited to those required for construction and maintenance and would generally be formed from permeable stone.
- 7.3.4 Once operational, the Proposed Development would not be permanently staffed. Vehicular access would be limited principally to periodic inspection, maintenance, agricultural and landscape-management activities, normally undertaken using a small van, four-wheel-drive vehicle or agricultural vehicle.



- 7.3.5 Detailed construction access, delivery management, worker travel and highway-safety measures would be controlled through the Construction Traffic Management Plan.

7.4 Movement

- 7.4.1 The Site contains a network of established Public Rights of Way, green lanes and farm routes. These form an important part of the local movement network and have been treated as integral components of the design rather than as constraints to be diverted around the development.
- 7.4.2 Approximately 5 km of existing Public Rights of Way and green lanes would be enhanced. Routes through the solar-development areas would generally be accommodated within corridors at least 10 m wide, providing separation from fencing and allowing space for grassland and wildflower margins.
- 7.4.3 Accessibility would be improved through the installation of accessible gates, improvements to path surfaces where required, reinstatement or replacement of crossings over drainage features and the provision of clearer directional signage.
- 7.4.4 Approximately 3.3 km of new permissive paths would provide access to parts of the Site that are currently private. These routes would connect with the existing network and provide additional opportunities for walking and access to the proposed orchard, wildflower areas and wider agricultural landscape.
- 7.4.5 Seating, picnic areas and interpretation boards would be provided at appropriate locations. These would help people understand the renewable-energy development, local ecology, agricultural landscape and historic environment.
- 7.4.6 The routes would be managed to maintain accessibility while retaining their rural character. The provision of planted margins and wider corridors would also allow the movement network to function as part of the ecological network across the Site.

7.5 Environmental Sustainability

- 7.5.1 The Proposed Development would generate renewable electricity without direct operational greenhouse-gas emissions. It is expected to generate sufficient electricity to meet the equivalent annual needs of approximately 42,077 Welsh homes and to displace approximately 2.8 million tonnes of carbon dioxide over its operational life.



- 7.5.2 The design seeks to use land efficiently by combining renewable-energy generation with continued agricultural, ecological and recreational functions. The spacing and height of the solar arrays would allow livestock grazing and vegetation management to continue beneath and between the panels.
- 7.5.3 The solar-panel supports would generally be driven into the ground, avoiding the need for extensive foundations or alterations to the landform. Existing accesses and tracks would be reused wherever practicable, while new tracks and operational compounds would generally have permeable surfaces.
- 7.5.4 Rainwater would continue to fall onto vegetated ground beneath and between the panels. Grassland cover would be established and maintained to reduce erosion, while appropriate buffers would be retained from reens, ditches and watercourses.
- 7.5.5 Operational lighting would be limited to that required for maintenance, security and emergency purposes. CCTV would use infrared technology, and no part of the solar farm would be continuously illuminated.
- 7.5.6 Construction materials and prefabricated components would be sourced and used efficiently wherever practicable. At the end of the operational period, the solar panels, frames, electrical equipment, cabling and fencing would be removed and reused or recycled where possible, allowing the land to be restored to full agricultural use.

7.6 Green Infrastructure Statement

Approach to Green Infrastructure

- 7.6.1 Green infrastructure comprises the network of natural and semi-natural features that provides environmental, social and economic benefits. For the Proposed Development, this includes not only proposed planting and habitat creation but also the Site's existing hedgerows, trees, woodland, agricultural grassland, reens, ditches, field margins, Public Rights of Way and undeveloped open land.
- 7.6.2 Planning Policy Wales requires a proportionate Green Infrastructure Statement to explain how green infrastructure has been incorporated into a development and how the step-wise approach has been applied. The statement should demonstrate multifunctional outcomes appropriate to the Site and show how the proposal would secure a net benefit for biodiversity and ecosystem resilience.
- 7.6.3 This statement has therefore been prepared to:



- i) identify the principal existing green infrastructure within and surrounding the Site;
- ii) explain how existing features would be avoided, retained and protected;
- iii) identify how unavoidable effects would be minimised and mitigated;
- iv) describe the new green infrastructure and biodiversity enhancements incorporated into the design; and
- v) demonstrate the wider landscape, ecological, recreational, water-management and climate benefits of the resulting network.

7.6.4 This follows the broad approach adopted by the example Green Infrastructure Statement, which considers existing provision, removal, retention, enhancement and the application of the step-wise approach.

Existing Green Infrastructure

7.6.5 The Site is principally in agricultural use and comprises medium to large pastoral and arable fields. These are divided by an established network of native hedgerows, hedgerow trees, tree belts, small woodlands, reens and drainage ditches.

7.6.6 The field boundaries provide habitat, visual enclosure and ecological connectivity across the Site. Mature trees and woodland provide additional habitat and landscape structure, while reens, ditches and associated margins form important aquatic and terrestrial corridors.

7.6.7 Grassland, arable margins and less intensively managed areas provide habitat for invertebrates, birds, reptiles and small mammals. The Site and surrounding landscape are also used by protected and priority species, including bats, breeding birds, lapwing, otter, water vole and shrill carder bee.

7.6.8 The network of Public Rights of Way, green lanes and farm tracks also forms part of the Site's green infrastructure. These routes provide recreational access, connections between settlements and opportunities to experience the local landscape.

7.6.9 Beyond the Site, the green infrastructure network connects with woodland at Llanwern Park and Craig Y Perthi, the wider agricultural landscape and the reen and ditch network of the Gwent Levels. The Gwent Levels – Redwick and Llandeenny SSSI lies adjacent to the southeastern part of the revised Site but is not included within it.



- 7.6.10 The step-wise approach is a hierarchical process. Its purpose is first to avoid adverse effects on biodiversity and ecosystem resilience, then to minimise those that cannot reasonably be avoided, restore or mitigate any remaining effects, and only as a last resort compensate for residual harm. Enhancement and the delivery of a Net Benefit for Biodiversity are considered throughout the process rather than only after mitigation has been identified.

Application of the Step-wise Approach

- 7.6.11 The design has applied the step-wise approach by giving priority to the avoidance of harm before considering minimisation, mitigation or compensation. This has been central to the redesign following the determination of the 2024 Scheme.

Avoidance

- 7.6.12 The principal avoidance measure is the removal of approximately 44 ha from the southeastern part of the 2024 Scheme. This ensures that no solar infrastructure or associated construction activity is proposed within the Gwent Levels – Redwick and Llandeenny SSSI.
- 7.6.13 The revised development also avoids the area in which buried peat deposits were previously identified. Development has been set back from woodland, important trees, hedgerows, reens and ditches, while substantial undeveloped areas have been retained around Bishton and nearby heritage assets.
- 7.6.14 Access tracks, cabling and infrastructure have been positioned to follow existing farm tracks, accesses, field gates and field boundaries wherever practicable. This reduces the extent of new land disturbance, avoids unnecessary hedgerow removal and limits fragmentation of the existing green infrastructure network. Construction disturbance would be controlled through defined working areas and environmental management measures.

Minimisation

- 7.6.15 The overall Site has been reduced from approximately 240 ha to 196 ha, while the fenced and panelled area has reduced from approximately 135 ha to 111 ha. The removal of the BESS and central inverter infrastructure further reduces the physical footprint and amount of containerised equipment.
- 7.6.16 Standard minimum offsets incorporated into the design include:



- i) 15 m from woodland, including ancient woodland;
- ii) appropriate buffers determined for ancient and veteran trees;
- iii) 12 m from reens;
- iv) 7 m from other ditches; and
- v) 5 m from hedgerows.

7.6.17 Access tracks, cabling and infrastructure have been positioned to follow existing routes and field boundaries wherever practicable. Construction disturbance would be controlled through defined working areas and environmental management measures.

Mitigation and Compensation

7.6.18 Where limited effects cannot be avoided, mitigation would include replacement and reinforcement of hedgerows, new native planting, restoration of temporarily disturbed land, maintenance of habitat corridors and sensitive management of lighting, drainage and construction activities.

7.6.19 Any unavoidable habitat losses would be quantified through the Ecological Impact Assessment and addressed through appropriate habitat creation and long-term management. Compensation would only be relied upon where avoidance and minimisation were not reasonably practicable.

Enhancement

7.6.20 The design goes beyond the mitigation of effects and incorporates substantial habitat creation and access improvements intended to deliver an overall net benefit for biodiversity and a more resilient green infrastructure network.

Retention and Protection

7.6.21 The established network of hedgerows, trees, woodland, reens and ditches would be retained wherever practicable. The solar-development areas would remain contained within the existing field framework, with fencing positioned inside the environmental buffers.

7.6.22 Trees and hedgerows close to construction works would be protected through defined root-protection areas and protective fencing. Works affecting vegetation



would be timed and supervised to avoid harm to nesting birds and other protected species.

7.6.23 Construction activities would be managed through a Construction Environmental Management Plan. This would include measures for pollution prevention, soil management, protection of watercourses, control of lighting and noise, and procedures to prevent wildlife becoming trapped within excavations.

7.6.24 An Ecological Clerk of Works would oversee sensitive construction activities where required. Existing ecological corridors would remain unlit, and operational lighting would be kept to the minimum necessary.

Creation and Enhancement

7.6.25 The Proposed Development would strengthen the green infrastructure network through:

- i) more than 11 km of new native hedgerow and tree planting;
- ii) reinforcement and gapping-up of existing hedgerows;
- iii) new woodland, copses and belts of native trees and shrubs;
- iv) creation of a community orchard;
- v) approximately 43.3 ha of diverse wildflower meadow, including areas containing food plants suitable for shrill carder bee;
- vi) approximately 16.5 ha of dedicated lapwing nesting habitat, supported by predator fencing and appropriate habitat management;
- vii) species-rich margins along Public Rights of Way, permissive paths, field boundaries and development buffers; and
- viii) bird and bat boxes, bee and invertebrate hotels, reptile hibernacula and log piles.

7.6.26 The proposed lapwing area comprises a larger and more coherent area than that included within the 2024 Scheme. Its open character and limited boundary vegetation would be maintained to provide suitable nesting and foraging conditions.

7.6.27 Wildflower areas would diversify land that is currently subject principally to agricultural management. Appropriate seed mixtures and management regimes would be selected to reflect local conditions and the requirements of target species.



- 7.6.28 New planting would use locally appropriate native species and would strengthen connections between existing woodland, hedgerows, watercourses and grassland habitats. It would also provide screening and reinforce the characteristic field pattern.

Multifunctional Benefits

- 7.6.29 The resulting green infrastructure network would perform several complementary functions. Ecologically, it would increase the extent and diversity of habitats, strengthen connections between existing features and improve the ability of species to move through the landscape.
- 7.6.30 In landscape terms, retained and proposed vegetation would reinforce field boundaries, screen or filter views of infrastructure and help integrate the solar farm with its surroundings. Undeveloped and planted areas would also help protect the setting of Bishton and nearby heritage assets.
- 7.6.31 The improved Public Rights of Way and permissive-path network would provide recreational and wellbeing benefits, opening additional land to public access and creating opportunities for seating, interpretation and contact with nature.
- 7.6.32 Grassland, woodland and hedgerow creation would provide carbon sequestration and soil benefits. Reduced-intensity agricultural management would lessen soil disturbance and the use of fertilisers and pesticides, while vegetated buffers would assist with water infiltration, filtration and erosion control.
- 7.6.33 The proposals therefore provide an integrated response in which renewable-energy generation, agriculture, biodiversity, landscape, water management and public access would operate together rather than as separate elements.

Management and Delivery

- 7.6.34 The Illustrative Landscape Masterplan establishes the overall green infrastructure framework. Detailed planting, habitat creation and management proposals would be developed through the landscape and ecological plans accompanying the application and secured through an appropriate long-term management plan.
- 7.6.35 Management would include the establishment and replacement of planting, hedgerow and woodland maintenance, management of wildflower grassland, maintenance of lapwing habitat and predator fencing, inspection of ecological enhancement features and upkeep of Public Rights of Way and permissive paths.



- 7.6.36 Monitoring would be undertaken at appropriate intervals, including during the establishment period and at Years 1, 3 and 5 where relevant, with longer-term monitoring undertaken in accordance with the approved management plan. Monitoring would assess whether the intended habitats, planting and ecological functions were being established successfully.
- 7.6.37 Where monitoring identifies that planting, habitats or ecological features are not achieving their intended objectives, appropriate remedial action would be undertaken. This may include replacement planting, changes to cutting or grazing regimes, reseedling, repairs to predator fencing or the relocation or replacement of ecological enhancement features.
- 7.6.38 The Proposed Development has therefore been designed to avoid and minimise effects on the existing green infrastructure network before considering mitigation or compensation. Subject to confirmation through the final Ecological Impact Assessment, compensation would only be required for any residual habitat effects that cannot be addressed through avoidance, minimisation, restoration or mitigation.
- 7.6.39 The extensive habitat creation, planting, ecological management and public-access improvements incorporated into the design are expected to strengthen ecosystem resilience and deliver an overall Net Benefit for Biodiversity. The quantified outcome would be confirmed through the Ecological Impact Assessment and secured through the detailed landscape and ecological management proposals.

7.7 Community Safety

- 7.7.1 The Proposed Development would not be permanently staffed. Security would be provided through approximately 2 m high deer and stock fencing, secure access gates and inward-facing infrared CCTV cameras.
- 7.7.2 Fencing would follow the solar-development areas rather than the outer Site boundary, allowing Public Rights of Way, permissive paths, landscape buffers and habitat areas to remain outside the secured compounds wherever practicable. Mammal gates would be incorporated to maintain movement by terrestrial wildlife.
- 7.7.3 CCTV cameras would be directed into the Site and would operate without continuous visible lighting. The substation and other electrical infrastructure would be separately secured and accessed only by authorised personnel.



- 7.7.4 Public routes would be separated from solar infrastructure by appropriately wide corridors. Accessible gates, signage and clear wayfinding would help users move safely through the Site.
- 7.7.5 During construction, active working areas would be secured and controlled through temporary fencing, warning signs and traffic-management measures. Banksmen would supervise vehicle movements where these interact with Public Rights of Way or other public routes.
- 7.7.6 The Construction Environmental Management Plan and Construction Traffic Management Plan would establish procedures for maintaining public safety, managing temporary route arrangements and communicating with local residents and path users.

7.8 Response to Planning Policy

- 7.8.1 The Proposed Development has been designed with regard to the five objectives of good design identified in TAN 12: character, access, movement, environmental sustainability and community safety. These objectives have informed the site analysis, design evolution and final design response described throughout this DAS.
- 7.8.2 The proposal responds to the character of the Site by retaining its field pattern, landform and principal landscape features; reducing the extent of development; avoiding the Gwent Levels SSSI; and integrating infrastructure through retained and proposed planting.
- 7.8.3 Access and movement have been addressed through the use of existing farm entrances and tracks, a managed construction-access strategy, enhancement of existing Public Rights of Way and the creation of new permissive routes.
- 7.8.4 Environmental sustainability is reflected in the generation of renewable electricity, continued agricultural use, efficient use of land, limited ground disturbance, permeable construction, habitat creation and the ability to remove and recycle the infrastructure at the end of the operational period.
- 7.8.5 The Green Infrastructure Statement demonstrates how the step-wise approach has influenced the design and how landscape, biodiversity, recreation, water management and climate functions have been integrated. This responds to Planning Policy Wales Edition 12 and Future Wales Policy 9, which seek to safeguard



biodiversity and ecosystem resilience and maximise opportunities for green infrastructure.

- 7.8.6 The Gwent Levels are identified as a National Natural Resource Area under Future Wales Policy 9. The removal of development from the SSSI, protection of the reed and ditch network, expansion of species-specific habitat and strengthening of ecological connections represent a direct design response to the sensitivity of that wider landscape.
- 7.8.7 Overall, the design provides a smaller and simpler solar-led scheme that responds positively to its context and incorporates environmental protection and enhancement as integral elements of the Proposed Development.

8.0 CONCLUSION

- 8.1.1 This Design and Access Statement has been prepared in support of the revised Craig Y Perthi Solar Farm, a nationally significant renewable-energy development proposed on land east of Newport.
- 8.1.2 The design has evolved through environmental assessment, consultation and consideration of the findings of the examination and determination of the 2024 Scheme. The revised proposal is smaller, simpler and more strongly landscape-led, with the Site reduced from approximately 240 ha to 196 ha and the fenced and panelled area reduced from approximately 135 ha to 111 ha.
- 8.1.3 The southeastern part of the previous scheme has been removed, ensuring that no development is proposed within the Gwent Levels – Redwick and Llandeenny SSSI. The battery energy storage system and central inverter infrastructure have also been removed, reducing the physical extent and semi-industrial character of the Proposed Development.
- 8.1.4 The solar arrays would be accommodated within the established agricultural field pattern, with existing hedgerows, trees, woodland, reens and ditches retained wherever practicable. The Proposed Development would also deliver substantial green infrastructure benefits, including more than 11 km of new hedgerow and tree planting, approximately 43.3 ha of diverse wildflower meadow, approximately 16.5 ha of dedicated lapwing habitat and improvements to the Public Rights of Way and permissive-path network.
- 8.1.5 Existing farm entrances, tracks and field openings would be used wherever practicable, while construction traffic and environmental effects would be managed through appropriate management plans. Once operational, the Site would not be permanently staffed and access would be limited principally to maintenance, agricultural and landscape-management activities.
- 8.1.6 The Proposed Development would generate sufficient renewable electricity to meet the equivalent annual needs of approximately 42,077 Welsh homes and is estimated to displace approximately 2.8 million tonnes of carbon dioxide over its operational life. It would therefore make a substantial contribution to renewable-energy generation while retaining agricultural use and delivering landscape, biodiversity and recreational benefits.



8.1.7 Overall, the design responds positively to the Site and its surroundings and demonstrates how renewable-energy infrastructure can be integrated with an enhanced network of agricultural land, habitats, landscape features and public routes. The Proposed Development represents a materially improved design that applies the step-wise approach, responds directly to the principal concerns identified through the previous application and delivers a multifunctional and resilient scheme.