

7 LANDSCAPE AND VISUAL EFFECTS

Introduction

- 7.1 This chapter of the ES assesses the likely significant effects of the Development on the environment in respect of Landscape and Visual Effects.
- 7.2 The chapter has been prepared by Stantec. Stantec is a registered practice of the UK Landscape Institute and Institute of Environmental Management and Assessment ('IEMA') EIS Quality Mark Registrant. This Chapter has been prepared by Elliott Farley (Licentiate of the Landscape Institute), reviewed Claire McHarrie (Chartered Member of the Landscape Institute and Associate Director at Stantec) and approved by Greg Mahon (Practitioner Member of the Institute of Environmental Management and Assessment, Chartered Member of the Landscape Institute and Associate Director at Stantec).

Policy Context

National Planning Policy

Planning Policy for Wales

- 7.3 Planning Policy Walesⁱ ('PPW') Edition 12 sets out the land use planning policies of the Welsh Government and is supported by a series of Technical Advice Notes ('TAN') Welsh Government Circulars and policy clarification letters.
- 7.4 Theme 6 of PPW addresses Distinctive and Natural Placemaking and Well-being, and includes protecting and enhancing landscapes, habitats, biodiversity, geodiversity and the historic environment in their own right, as well as other components of the natural world. PPW recognises the fundamental role played by Green Infrastructure in shaping places and our sense of well-being.
- 7.5 With respect to Landscapes, paragraph 6.3.1 defines landscape as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. Paragraph 6.3.3 states that 'all the landscapes of Wales are valued for their intrinsic contribution to a sense of place'. Local authorities should protect and enhance the special characteristics of their landscapes, whilst paying due regard to the social, economic, environmental and cultural benefits they provide.

Future Wales: The National Plan 2040

- 7.6 Future Wales: The National Plan 2040ⁱⁱ was adopted in February 2021 and recognises that Wales can become a world leader in renewable energy technologies. The Welsh Government recognises Wales's potential for solar generation and supports both large and community scaled projects and commits to ensuring the planning system in Wales provides a strong lead for renewable energy development.
- 7.7 Policy 17 sets out that the Welsh Government strongly supports the principle of renewable and low carbon energy development from all technologies and at all scales to meet our future energy needs and that decision makers must give significant weight to the need to meet Wales' international commitments. The policy also stipulates how applications for large-scale solar should demonstrate that they will not have an unacceptable adverse impact on the environment, including the setting of National Parks.
- 7.8 Policy 18 provides the criteria for assessing large scale proposals for renewable and low carbon energy and is required to be considered with Policy 17. The criteria set out in Policy 18 require that proposed development:
- *“does not have an unacceptable adverse impact on the surrounding landscape, with particular reference to the setting of National Parks and Areas of Outstanding Natural Beauty;*
 - *has no unacceptable adverse visual impacts on nearby communities and individual dwellings;*

- *has no unacceptable adverse impacts on national statutory designated sites for nature conservation, protected habitats and species; and*
- *includes biodiversity enhancement measures to provide a net benefit for biodiversity.”*

7.9 Policy 18 also states that the ‘cumulative impacts of existing and consented renewable energy schemes should also be considered’.

Designing for Renewable Energy in Wales

7.10 The purpose of Designing for Renewable Energy in Wales¹ⁱⁱⁱ (DREW) is to set out the key design objectives and considerations for the sensitive development of large-scale onshore wind and solar installations as well as their ancillary development in Wales. The document updates and expands on the previous Designing Wind Farms in Wales 2014 good practice guidance, published by the Design Commission for Wales.

7.11 The document sets out a number of design objectives to ensure proposals clearly address the requirements of Policies 17 and 18 of Future Wales, as well as Policy 9 and other relevant policies in Future Wales and reflect on the principles of good, contextual design.

7.12 At paragraph 4.2.1, objective “Avoid unacceptable environmental impacts on local communities through the design processes” stipulates:

- *“The scale of these types of development will require environmental changes, both locally and to the wider landscape. The design should seek to accommodate these changes in ways that take a broad view of the changes required. That is a view of acceptance of landscape change in parts of Wales and that the developments can be both positive and catalytic to wider changes in land use and the ecology. Impacts upon the setting of cultural, historic or archaeological landscape features should be particularly carefully considered.”*

7.13 At paragraph 4.2.3, objective “Avoid negative environmental impacts on nature and wildlife” states:

- *“In Planning Policy Wales (PPW) the Welsh Government sets out an approach to the maintenance and enhancement of biodiversity and increasing the ecosystem resilience of our natural environment. PPW should inform the site selection and design process to ensure that development proposals are directly shaped by the principle of maintaining and enhancing biodiversity so that wider ecosystem resilience is secured, and sensitive locations avoided.*
- *Impacts at all stages in the life cycle of the development should be considered in the design process, including during construction, operation, decommissioning and the after-care period. The approaches to avoiding and minimising impacts should be creative, robust, feasible and value adding. Effective restoration at the end of a scheme’s life should be considered from the earliest stages. Avoid, and where necessary mitigate against, unacceptable environmental impacts on soils, nature and wildlife, and enhance ecological diversity.*
- *Solar farm layouts can leave much of the land beneath the solar array panels available for other uses, but the installation and decommissioning process can be destructive. Design should seek to enhance biodiversity of this land to provide a net benefit and secure ecosystem resilience. Understanding the ecological context of the site and the functional ecosystems will help achieve this.”*

7.14 At paragraph 4.2.7, objective “Make meaningful changes to the landscape through design” specifies:

¹ Design Commission for Wales/Comisiwn Dylunio Cymru, November 2023. Designing for Renewable Energy in Wales.

- *"The arrangement of turbines or solar arrays needs to be carefully considered as a landscape design challenge, which considers environmental, aesthetic and cultural factors in addition to the technical and engineering design constraints. The design proposal should follow from a careful analysis of the existing landscape history, form, ecology and scenic characteristics, and meaningfully add new elements that either harmonise or contrast with what already exists."*

7.15 In Chapter 6, the DREW sets out a number of design considerations for solar farms, the aim of which is to facilitate production of solar renewable energy *"designed in a manner that complements the qualities of existing landscapes"* (para 6.1). The section stresses the importance of a multi-disciplinary approach to design of solar farms that involves all stakeholders and establishes clear design principles and objectives.

- *"Solar farm design is fundamentally a landscape design challenge of integrating a wide range of ecological and conservation disciplines with engineering, project and construction management skills. This type of landscape change needs to be designed in ways that directly address the inherent challenges and make a positive contribution to these landscapes. The design approach should not merely rely on mitigation measures to ameliorate scenic and nature impacts."* (Para 6.2)

7.16 The considerations identified in Chapter 6 are listed below, together with a summary of the key messages.

- i. **Location** – Solar farms should be located on sites which provide opportunities for continued farming or complementary land uses at ground level, are not designated, are capable of being screened and have suitable access and orientation;
- ii. **Response to scale** – sizes of fields of panels and the spacing of arrays should relate appropriately to the scale of the landscape. Consideration should be given to a dispersed approach in smaller-scale landscapes to aid screening;
- iii. **Perimeter screening** – it is noted that in Wales hilly landscapes are common and as a result solar farms can be seen over long distances. Perimeter and internal planting are encouraged to limit local impacts, but where visible (as it is accepted solar farms will be in most cases from some vantage points), they should be arranged in such a way as to *"work with the prevailing landscape forms"*;
- iv. **Colour** – reduce contrast between the colours and textures of the landscape and the panel array;
- v. **Local environmental impacts** – demonstrate layout response to protection the local community from unacceptable environmental impacts during construction maintenance and decommissioning. Identify potential for farming, biodiversity and landscape enhancement, including off-site;
- vi. **Cumulative impacts** – consider the combined impact of existing and proposed solar farms on the landscape in particular the resulting geometric patterns, and effectiveness of associated landscape strategies in retaining the characteristic scale of landscape subdivision;
- vii. **Ancillary infrastructure** – siting and design to respond to landscape characteristics and take into account landscape and visual impacts; and
- viii. **Long-term considerations** – consider the potential for restoration to pre-development appearance following decommission, addressing potential impacts on habitats and important features both during and post operation. Decommissioning to include restoration the site as required by Future Wales Policy 18.

Local Planning Policy

Pembrokeshire County Council Local Development Plan

- 7.17 The Pembrokeshire County Council Local Development Plan^{iv} was adopted in 2013 and provides the policy context for directing development to appropriate locations, conserving the natural, built and historic environment and providing a basis for rational and consistent decision-making on planning applications. The LDP policies are addressed in the Planning Statement. Assessment Methodology

Consultation

- 7.18 Table 7.1 below describes the consultation that has been undertaken with respect to the assessment of the Development’s likely significant landscape and visual effects.

Table 7.1: Key Correspondence with Statutory Consultees

Consultee	Comments	Applicant’s Response
EIA Scoping Direction Response Planning and Environment Decisions Wales (PEDW)	<p>ID.16 ‘PCC are satisfied with the approach of the LVIA. The SR notes guidance that the LVIA will be prepared in accordance with, this is supported however, NRW advise that additional guidance that is not referred to in the SR should inform the preparation of the LVIA (see Appendix 1). It is proposed that the LVIA will assess the effects of the development at a number of stages from baseline, during construction, on completion (in the winter without the benefit of new mitigation planting), 15 years post completion (in the summer with the benefit of new mitigation planting) and 40 years post completion at decommissioning. In line with NRW’s response in Appendix 1, an assessment should be made at year 15 during the winter when deciduous mitigation planting may be less effective at screening the proposals, in addition to those listed in the SR.’</p>	<p>The assessment of landscape and visual effects at Year 15 have been made taking into consideration winter conditions. The Accurate Visual Representations (AVRs) that have been prepared for key viewpoints are based on winter-time photographs and illustrate proposed vegetation as it will appear in the winter, both at Year 1 and Year 15. The effects of decommissioning the solar farm at Year 40 are included in the assessment. Over the solar farms 40-year life cycle, the improved vegetation network will be maintained so that upon decommissioning of the solar farm, the landscape proposals will remain.</p>
	<p>ID.17 ‘The SR identifies a Zone of Theoretical Visibility (ZTV) for the LVIA. The extent of land covered by the ZTV, north and south of the site, is shown in Figure 5 of the SR as limited to within 2km of the site. In line with NRW’s comments in Appendix 1, the ES should provide a robust reasoning for this, as the study area for an LVIA for a scheme of this size is usually expected to be 3-5km. NRW also note that the ZTV was based on landform and therefore does not account for above ground features such as buildings and vegetation which will reduce the area of actual visibility compared with the results of the ZTV. The ZTV includes areas within the Pembrokeshire Coast National Park (PCNP), however it is not clear at this stage to what extent of the proposed development would be visible within the PCNP. The ES should provide clarity on this.’</p>	<p>Online viewshed mapping and topographical analysis were initially used to identify potential distant viewpoint locations up to a distance of 5km which were then ground-tested. Intervisibility with the Site was not identified beyond a 2km range. The study area was therefore limited to allow an optimum level of detail about relevant landscape and visual receptors, land uses and sensitive features in areas where the ZTV indicates the Development will theoretically be visible.</p> <p>The ZTV accounts for woodland blocks at an assumed height of 15m and existing built form at an assumed height of 10m, however, it does not account for individual trees and hedgerows or infrastructure.</p> <p>The ZTV acts as a guide to the Landscape and visual appraisal. All visual receptors have been ground tested and, where appropriate, scoped out of the</p>

		assessment in accordance with the GLVIA.
	<p>ID.18 <i>'Figure 7.11 identifies locations of photographic viewpoints scoped in and scoped out based on a site visit, this includes three viewpoints within the PCNP, others located in the setting of the PCNP and two viewpoints within the PCNP that have been scoped out.</i></p> <p><i>NRW note that areas south of the site within the PCNP, e.g. around The Downs, are shown to have visibility on the ZTV, but no viewpoints have been considered within these areas. NRW assume that this is due to the impact of intervening vegetation on potential visibility of the proposed development, however, in line with NRW's advice PEDW will require that the ES provides justifications for any photographic viewpoints within the PCNP that have been scoped out.</i></p> <p><i>As advised by NRW, photomontages should be included in the ES to illustrate potential impacts on landscape and visual receptors, including at applicable viewpoints within the PCNP.</i></p> <p><i>Photomontages and photography should be prepared and presented in accordance with the principles set out in TGN 06/19.'</i></p>	<p>Visibility towards the Site from the PCNP has been found to be limited. In order to demonstrate the nature of these views a total of four Site Context Photographs are included within and on the edge of the National Park, and an AVR prepared from the hill-top near Portclew House to the southeast of the Site.</p> <p>All photographs and photomontages have been prepared and presented in accordance with TGN 06/19.</p>
	<p>ID.19 <i>'NRW advise that the LVIA should consider the extent to which the development achieves or is in accordance with the guidelines for the LCA. In particular, the guideline to: 'Manage expansion of energy related developments such as solar, wind and power lines so that the capacity is largely open landscape is not exceeded'.</i></p>	<p>The capacity of landscape character areas to accommodate energy-related development is considered both in the description of the baseline and the future baseline. The cumulative effects assessment considers the Development alongside any developments applied for against the LCA's sensitivity to such development. Sensitivity is arrived at through an analysis of value and the capacity of the landscape receptor to accommodate the type of development proposed (i.e. solar energy).</p> <p>As set out in Appendix 7.1 Methodology, "capacity" in this assessment considered as the receptor's 'susceptibility' to the type of development proposed.</p>
	<p>ID.20 <i>'The SR identifies the need to assess the potential cumulative effects of the proposed development with a nearby existing solar PV development on land east of Mylett's Hill, Golden Hill, 1.6 km north of the site.</i></p> <p><i>NRW note that there are other PV developments located within the LCA, including developments at Chapel Hill approximately 4 km southwest of the site and at Wogaston. It is noted that these developments are not likely to be viewed from the same location and are located at a distance from each other, however, there is</i></p>	<p>The solar farms identified in ID.20 have been constructed and they are considered within the description of the existing landscape baseline and nature of existing views. Viewpoints have been selected to be representative of the views of the Site and to demonstrate the components in that view, including existing solar farms. Through ground testing one location has been identified where existing solar developments are visible sequentially or in combination with the Site, that is, from the B4584 on the edge of the PCNP. The assessment of effects takes this into</p>

	<p><i>the potential for sequential visual impacts and exacerbated existing impacts within the LCA. The LVIA should therefore report on the potential for these impacts to occur.'</i></p>	<p>account. No unconstructed solar farms have been identified as cumulative schemes within the study and wider area.</p>
	<p><i>ID.21 'The applicant's attention is drawn to NRW's comments in regard to the importance of design in landscape impact mitigation. The ES should explain the design evolution and how landscape and visual considerations have informed and shaped the proposals. Layout proposals should consider the design guidance - Designing for Renewable Energy in Wales, Design Commission for Wales.'</i></p>	<p>The proposals have been developed as part of an iterative process of design and assessment as advised in the guidance. Mitigation has been embedded into the design to safeguard features of landscape and visual sensitivity, to maximise the potential for beneficial effects and responding to policy and guidance. These themes are developed in further detail in the detailed design proposals.</p>
<p>EIA Scoping Direction – Appendix 1 Pembrokeshire County Council</p>	<p><i>The Landscape and Visual Impact Assessment approach is considered to be adequately described and should cover the assessment approach adequately. It is noted that the issue of protected trees (those with TPOs) has not been addressed but it is understood that relevant information has since been obtained from The LPA Landscape Officer and will be included.</i></p> <p><i>It is suggested that information is provided in as concise a manner as possible, with information presented in tabulated form as much as possible to reduce size and improve readability.</i></p>	<p>Noted.</p>
<p>EIA Scoping Direction – Appendix 1 Natural Resources Wales</p>	<p><i>To accord with Policy 18 of Future Wales: The National Plan 2040 (FW), the proposals should not have an unacceptable adverse impact on the surrounding landscape, particularly on the setting of the PCNP.</i></p> <p><i>The Scoping Report cites relevant guidance for the preparation of the LVIA. We advise that other relevant guidance not referred to in the Scoping Report and which should inform the preparation of the LVIA, is:</i></p> <p><i>NRW Guidance Note 46 Using LANDMAP in Landscape and Visual Impact Assessments.</i></p> <p><i>Technical Guidance Note (TGN) 02/21 Assessing Landscape Value Outside National Designations, Landscape Institute.</i></p> <p><i>TGN 06/19 Visual Representation of development proposals, Landscape Institute.</i></p>	<p>Noted.</p>

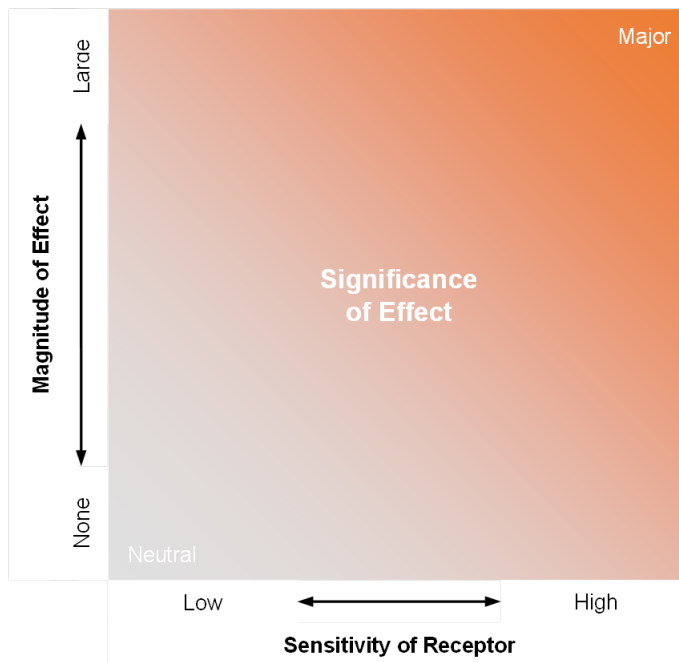
Methodology

Overview

- 7.19 A detailed LVIA methodology is set out in **Appendix 7.1: LVIA Methodology**.
- 7.20 The LVIA methodology has been drawn from best practice guidelines, including the Guidelines for Landscape and Visual Impact Assessment, Third Edition ('GLVIA3')^v. The aim of these guidelines is to set high standards for the scope and content of landscape and visual impact assessment and to establish certain principles that will help to achieve consistency, credibility, transparency and effectiveness throughout the assessment.
- 7.21 The assessment of landscape and visual effects, in common with the assessment of many environmental effects, includes a combination of objective and subjective judgements, and it is therefore important that a structured and consistent approach is adopted to ensure that the assessment undertaken is as objective as possible.
- 7.22 A landscape assessment is the systematic description and analysis of the features within the landscape, such as landform; vegetation cover; settlement pattern; building forms; transport patterns; and land uses; which together create a particular sense of place. A visual assessment considers visual receptors, which are the viewers of and within the landscape, and include those at locations such as residential and business properties; public buildings; transport routes; Public Rights of Way (PRoW); National Cycle Routes (NCR); public open space; and recognised scenic routes.
- 7.23 The term 'landscape' in this chapter adopts the definition as provided in the European Landscape Convention ('ELC')^{vi} and refers equally to areas of rural countryside and urban built-up areas:
- *"Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."*

Assessment of Effects

- 7.24 The sensitivity of landscape receptors is a combination of the value of the landscape receptor (high, medium, low or very low) and the susceptibility of the landscape receptor to the type of change proposed (high, medium or low), using professional judgement. The landscape magnitude of effect (change) is a product of the scale of the effect, the scale over which that effect is experienced, the permanence of the effect and its reversibility (large, medium, small, very small or none).
- 7.25 The sensitivity of visual receptors is a combination of the value of the views (high, medium or low) and the susceptibility of the visual receptor to the type of change proposed (high, medium or low), using professional judgement. The visual magnitude of effect (change) experienced is determined with reference to the scale of change in the view; whether the view is fixed or transient; and the duration of the change (large, medium, small, very small or none).
- 7.26 The significance of landscape and visual effects is derived from a combination of assessing the sensitivity of the receptor and the magnitude of effect (change) experienced as a result of the Development (major, moderate, minor, negligible or neutral). Assessment of significance of effects is subject to professional judgement, however Plate 7.1: Significance of Effects illustrates the general correlation between sensitivity and magnitude of effect (change). The significance of landscape and visual effects can be beneficial or adverse.

Plate 7.1: Significance of Effects*Significance Criteria*

- 7.28 The significance of effect thresholds for landscape and visual effects has been determined by considering the sensitivity of the receptor concerned alongside the magnitude of effect that will be experienced. Effects that have been graded as being 'Major' or 'Moderate' are considered to be significant with respect to the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017^{vii}. Effects that have been graded as 'Minor' to 'Neutral' constitute effects that are not considered to be significant.

Limitations and Assumptions

- 7.29 Limitations to the assessment include:

- The baseline assessment has been based on information readily available at the time of undertaking the assessment;
- During visits to the Site and surrounding area, weather conditions, the time of day and seasonal factors may affect the assessment and record of the environment.

- 7.30 The following assumptions have been made in the assessment:

- The construction phase will follow the indicative programme set out in Chapter 5: Construction Methodology & Phasing of the ES. However, this has been assessed as a 'worst-case' scenario for the purpose of this assessment, where all construction comes forward simultaneously;
- Tall plant and machinery will be in place for the minimum practicable period of time;
- With respect to judgements on landscape and visual susceptibility, the 'nature/form of the type of development proposed' has been considered to predominantly comprise solar PV panels, as well as a substation. To avoid double-counting, when making judgements on susceptibility the 'nature/form of the type of development proposed' does not infer the degree of proximity to a particular receptor, nor an indication of the duration or reversibility of an effect; these aspects are instead considered when determining the magnitude of effects;

- The assessment of likely landscape and visual effects and identification of likely significant effects at Year 1 of the completed Development is based on the following material:
- Proposed Site Plan (**Figure 3.3**);
- Description of the Development, including heights, as set out in Chapter 3 Site and Development Description, for PV panels, surfacing, fencing and ancillary equipment; and
- Landscape Strategy Plans (**Figure 7.12**).
- The assessment of likely residual landscape and visual effects of the Development after mitigation, at Year 15 of the completed Development during winter, and identification of likely significant residual effects is based on the successful establishment of proposed planting specified in Landscape Strategy Plan (**Figure 7.12**) and illustrated in **Appendix 7.7: Photomontages** (Year 15). Proposed planting is assumed to grow by approximately 1m every 3 years; and
- The assessment of the likely landscape and visual effects of the Development when decommissioned is based on the description set out in Chapter 5.

Study Area

- 7.31 The study area for the Development was determined based on the Zone of Theoretical Visibility (ZTV) mapping and field surveys and was agreed in consultation with the Local Planning Authority (LPA).
- 7.32 As illustrated on **Figure 7.1: Zone of Theoretical Visibility**, a ZTV has been prepared based on the Development's maximum height of 3.4m above existing ground level. Site visits were carried out in October 2023 and March 2024 accounting for winter views. The Site visits included viewpoints from potential high sensitivity visual receptors within the locations identified by the ZTV, due to the large scale of the Site. This confirmed that a study area of 2km from the Site is appropriate. This study area is adequate to identify all non-negligible effects on landscape and views given the scale and nature of the proposals and the context of the study area.

Baseline Conditions

Location and Context

- 7.33 As illustrated on **Figure 7.2: Site Context Plan**, the Site is located at Alleston Farm, Pembrokeshire. The Site sits within the administrative boundary of the Pembrokeshire County Council (PCC), adjacent to the southeast of Pembroke and approximately 300m to the west of the village of Lamphey.
- 7.34 Land use in the surrounding area of the Site is predominantly agricultural, with scattered farmhouses as well as residential development associated with Pembroke town and Lamphey village. The Site itself comprises 14 fields in arable / pasture use that extend around the Alleston Farm complex. The Site is accessible to vehicles from the north via Lower Lamphey Road and from the west via Watery Road.
- 7.35 The site is bound to the north by Lower Lamphey Road, which is a narrow country lane contained by belts of vegetation. Along Lower Lamphey Road there are several 2-storey, detached residential properties. Beyond the road to the north, the land use mostly comprises a mix of arable and pastoral fields that are dissected by a railway line and Upper Lamphey Road. To the east of the Site, the landscape is characterised by an irregular pattern of agricultural fields, separated by mature hedgerows and hedgerow trees. Meanwhile further east, approximately 300m from the Site, lies the settlement of Lamphey through which runs the B4584; and the Pembrokeshire Coast National Park (PCNP). To the south, the Site is again bound by agricultural fields and further south the PCNP. Watery Lane runs parallel to the Site's western boundary, beyond which is a pastoral fieldscape interspersed by blocks of woodland. The town of Pembroke sits adjacent to the Site to the northwest.
- 7.36 As illustrated in **Figure 7.2: Site Context Plan**, there are two operational solar farms located within the study area. These include:
- Land East of Mylett's Hill, Golden Hill (Ref: 14/0129/PA) 1.6km north of the Site; and

- Land at West Farm, Cosheston (Ref: 12/0050/PA) 3km north of the Site.

7.37 There are also solar farms 4km southwest of the Site at Chapel Hill, and 7.5km west nearby Wallaston Green. As each of these four solar schemes have been built and are operational, for the purposes of this assessment they are considered as part of the landscape baseline. Cumulative landscape and visual effects are also considered in paragraph 7.191 of this ES chapter.

Landform and Drainage

7.38 In relation to topography, the landscape within the study area is characterised by a series of ridgelines and valleys that run on an east/west axis to the north and south of the Site, as illustrated on **Figure 7.3: Topographical Features Plan**.

7.39 The Site sits on the lower to middle upper parts of a north facing slope, rising from a river corridor along the northern site boundary at around 15m Above Ordnance Datum ('AOD') to approximately 60m AOD at its highest point along its south southeastern boundary. Beyond the Site boundary to the south the land continues to rise to form a ridgeline at approximately 80m AOD that physically and visually contains the Site from the wider landscape to the south. To the north of the Site the landform flattens at around 20 to 25m AOD, beyond the railway line, then descends to meet the course of the River Pembroke, after which the land ascends steeply to meet another ridgeline at approximately 65 to 75m AOD.

7.40 The north-facing slope on which the Site is located is also incised by a wooded dell that divides the Site into two east and west hills. A stream runs northwards through this area, flanked by Alleston Wood within which Alleston Pond is located, centrally within the Site.

7.41 The drainage pattern relates to the series of ridges and valleys, with tributaries feeding southwards and northwards from the ridgelines to the larger streams and water courses in the valleys that drain towards Pembroke Dock in the west and the coast beyond. There are a number of ponds in the vicinity of the Site to the south and southwest. There are also a number of smaller watercourses and drainage ditches that align some of the Sites field boundaries, including a pond to the south of Alleston Wood.

Vegetation

7.42 The vegetation pattern within the Site and its surrounding context is varied and comprises hedgerow boundaries of varied condition often with hedgerow trees. Trees, tree groups and mixed and broadleaf woodland are also present, including broadleaf ancient woodland that tends to be associated with watercourses.

National Landscape Character

NLCA 48: Milford Haven^{2viii}

7.43 As illustrated on **Figure 7.4: Landscape Character Plan**, the Site is located within National Landscape Character Area 48: Milford Haven at the southeastern edge of the LCA. Key characteristics of the area, of relevance to the Site's context, include:

- *“Complex geology;*
- *Mixed fields and hedgerows – a rolling lowland agricultural landscape with a mosaic of mixed fields bounded by hedgerows. Mixed and conifer plantations fringe the upper ria and estuaries – with frequent copses and riparian (riverside) woodlands found on slopes throughout. Ancient semi-natural sessile oak woodlands are also among the area's valued habitats;*
- *Tranquil rural upper ria and estuaries – contrasting to the lower ria, the upper ria and estuaries and their surrounding woodland and farmland are intimate and rural Renowned scenic qualities; and*

² Natural Resources Wales, 31/03/2014. NLCA48 Milford Haven.

- *Renowned scenic qualities - The upper ria and estuaries have long been admired for its scenic qualities, with the Haven being mentioned in Shakespeare's Cymbeline."*

7.44 The landscape quality of the NLCA is recognised in its numerous designations that include part of the nationally designated Pembrokeshire Coast National Park (PCNP), which is managed and protected for its natural beauty, unique geology, and recreational opportunities. The perceptual aspects of the NLCA are further enhanced by the rich diversity of habitats, including river, marine, lowland heaths and semi natural oak woodland and some coastal and estuarine areas. However, the NLCA is also noted for its *"industrial buildings and a complicated assortment of towers and chimneys break the once gentle, rolling, farmland skyline, and a radiating network of electricity pylon lines"*. Notable industrial built form within the NLCA include the Pembroke Power Station, Pembroke Oil Refinery and the Valero Oil Terminal. An important contribution is made to the NLCA by cultural and historical associations, since the NLCA contains numerous Registered Parks and Gardens, Conservation Areas, scheduled monuments, and over 1500 listed buildings. Notably, within the locality of the Site is the Lamphey Conservation Area, Lamphey Bishops Palace scheduled monument, Lamphey Court Registered Park and Gardens, and Pembroke Castle. Recreational activities further enhance the value of the NLCA which is well connected by an extensive network of PRow including through the PCNP. Sustrans national cycle route 4 also passes through the NLCA and adjacent to the Site. Overall, the NLCA comprises distinctive components and characteristics, including the PCNP which is nationally and internationally designated for scenic beauty and landscape and cultural value. As such, its value is High.

NLCA 47: South Pembrokeshire Coast^{ix}

7.45 As illustrated on **Figure 7.4: Landscape Character Plan**, the Site is located approximately 300m from the boundary of this NLCA that is also the boundary to the Pembrokeshire Coast National Park.

7.46 Key characteristics of the area that are of relevance to the Site's context include:

- *"...Gentle inland landscape – with ridges ('The Ridgeway') and vales, and some narrow enclosed small valleys to the east;*
- *Agricultural land uses - mixed, with dairying, sheep rearing, cereal cropping and rough grazing on cliff tops. Fields are regular in shape, bounded by hedgerows;*
- *Streams and woodlands – water courses are often fringed by stands of mixed and broadleaved woodlands on incised slopes in the east...;*
- *Coastal habitats...;*
- *Agricultural and industrial archaeology - prominent Medieval open field systems survive around Manorbier. Remains of the coal/iron industry are evident in the east;*
- *Seaside towns...; and*
- *Scenic quality - varied and spectacular coastline (including Heritage Coast) with the greater extent being within the Pembrokeshire Coast National Park. But some tourism related developments are out of character."*

7.47 The value of NLCA47 is considered to be High as it is mostly within the PCNP which is nationally designated for its natural beauty, unique geology, and recreational opportunities. The National Park has a varied landscape of rugged cliffs, sandy beaches, wooded estuaries and wild inland hills which all contribute to the NLCA's sense of place and natural beauty. The geology of the area is of particular interest with many good exposures both inland and along the coast, exhibiting a variety of rock types and structural features such as natural arches, stacks, rock folding and sea caves. The NLCA also contains the Pembrokeshire Coast Path, much of it at cliff-top level, which is a designated National Trail and provides recreational value to the area. Many of the beaches along the coast also provide opportunity for activities such as surfing, climbing and coasteering.

NLCA 44: Taf and Cleddau Vales

7.48 As illustrated on **Figure 7.4: Landscape Character Plan**, the Site is located approximately 300m from the boundary of this NLCA to the east at Lamphey's settlement edge.

7.49 Key characteristics of the area that are of relevance to the Site's context include:

- *“Steep, often wooded, small glacial melt-water valleys with fast rivers and streams, generally running from north to south – particularly notable around Maesprior;*
- *A predominantly rural, settled, agricultural landscape, with a mix of fields of pasture, cereals and hay meadows. Higher land is of a heathy character;*
- *Fields are mainly medium sized, bounded by a regular pattern of hedgerows, hedgerow trees and hedgebanks;*
- *Small blocks of broadleaved woodland and mixed or coniferous plantations are located on slopes. Watercourses are often fringed by oak-dominated woodlands;*
- *The East and West Cleddau rivers are nationally and internationally recognised as important wildlife habitats. Both support populations of otter and submerged water crowfoot;*
- *A range of archaeological features is scattered across the landscape, with clusters of prehistoric ritual and funerary monuments occupying prominent positions;*
- *Narbeth, St Clears and Whitsand are the principal towns. Settlement elsewhere is dispersed, with hamlets and small villages in valleys; and*
- *The main A477 and A40 trunk roads cross this otherwise overwhelmingly peaceful, rolling countryside.”*

7.50 NLCA 44 is a predominantly rural area comprising a series of major river valleys associated with the Taff and Eastern and Western Cleddau. There is a strong sense of remoteness to the NLCA where the main river valleys are fringed in swathes of semi-natural woodland that present an intimate, enclosed character to the valleys, which is compounded by the secluded nature of the rivers that preclude long distance views. There is also a strong sense of time depth in the landscape which also affords high levels of tranquillity due the dispersed settlement pattern of historic villages and hamlets and the lack of large urban centres and other urban influences. The NLCA is also noted for containing an array of archaeological sites including prehistoric ritual and funerary monuments, Norman castles and ecclesiastical remains. As such, the value of the NLCA is considered to be **High**.

Local Landscape Character: Pembrokeshire County Landscape Character Assessment, May 2022³

LCA 25: Hundleton and Lamphey

7.51 The Pembrokeshire County Landscape Character Assessment (PCLCA) identifies the Site as falling entirely within Landscape Character Area (LCA): LCA 25: Hundleton and Lamphey as illustrated on **Figure 7.4: Landscape Character Plan**.

7.52 This landscape is described as a rural LCA that “comprises of a series of low east west rolling pastoral and arable ridges and hills interspersed with valleys... To the north it is more enclosed with trees and

³ Pembrokeshire County Council/White Consultants, May 2022. Pembrokeshire County Landscape Character Assessment: Final Report for Consultation.

features strip fields close to Cosheston and the largely extant Lamphey Bishops Palace and associated historic park and garden.”

7.53 Key characteristics identified for LCA 25 include the following, selected as being of relevance in consideration of the Development:

- *"A series of east west trending lowland escarpment ridges and rounded hills rising to between 60m AOD and 80m AOD with valleys between, often with steep slopes, falling to around 10m AOD.*
- *... mainly intensively managed pastoral farmland/improved grassland and there is a larger component of arable use in irregular fields ranging from small to medium/large. The fields are bounded primarily by low cut hedges/hedgebanks/stone walls to the south of Pembroke giving an open character*
- *Woodland, including ancient woodland, occurs mainly on valley bottoms or steeper hillsides ...*
- *The majority of the area is rural with small settlements and rural hamlets, with isolated farmsteads with nucleated complexes alongside traditional buildings.*
- *Lamphey is a small settlement cluster/Conservation Area with a small listed landmark medieval parish church and associated with the largely extant Lamphey Bishop's Palace scheduled monument and historic park and garden.*
- *Cosheston is characterised by a planned linear settlement and Conservation Area.*
- *Listed buildings associated with parks and occasionally scattered elsewhere*
- *There are vertical elements in places including power lines with pylons running east west to the Pembroke gas power station, wireless masts and small wind turbines which are noticeable on ridge tops.*
- *Prominent solar farms with ragged edges in irregular fields to the south and west on south facing slopes bounded by low cut hedges and overlooked from adjoining ridges. Solar farm also lies north of Pembroke located near a sub-station.*
- *Both the rail system and the A477 traverse the area...*
- *... National Cycle Route 4 passes through Lamphey to the east.*
- *Intervisibility with the National Park to the south, north east, east and west ...*
- *Key views are from and to the listed churches mentioned above, south towards the sea and from the Wales Coast Path.*
- *Tranquillity increases in valley floors and to the south.*
- *The series of low escarpment ridges to the south have open slopes and skylines including on the boundary with the National Park.*
- *Culturally this area is part of a wider area characterised by rich farmland, English speaking communities some way south of the Landsker Line and historically protected by Pembroke Castle."*

7.54 The PCNP is located outside this LCA, albeit it is noted that there is a degree of intervisibility with the National Park to the south, northeast, east and west. An important contribution is made to the LCA by cultural and historical associations, since the LCA contains Registered Parks and Gardens, Conservation Areas, scheduled monuments and a number of listed buildings. Notably, within the locality of the Site is

the Lamphey Conservation Area, Lamphey Bishops Palace scheduled monument, and Lamphey Court Registered Park and Gardens. Recreational activities further enhance the value of the LCA, which is well connected by an extensive network of PRoW including through the PCNP. Sustrans national cycle route 4 also passes through the LCA and adjacent to the Site. Generally, the LCA is a rural landscape however intensive human activity is evident and *“there are vertical elements in places including power lines with pylons running east west to the Pembroke gas power station, wireless masts and small wind turbines which are noticeable on ridge tops.”* Overall, the LCA is an area of common components and characteristics that are designated at county or borough level and make some positive contribution to landscape character. The value of the LCA is therefore considered to be Medium.

7.55 The PCLCA identifies landscape changes within Hundleton and Lamphey (LCA 25) including a trend for large scale solar farms, pressure for wind energy development and light pollution impacts associated with energy production. It also notes that intensification of agriculture is resulting in introduction of post and wire fencing instead of hedgebanks and hedges in places.

7.56 Management guidelines identified include:

- *“Manage expansion of energy related developments such as solar, wind and power lines so that the capacity of this largely open landscape is not exceeded.*
- *Conserve the landscape setting of Conservation Areas, parks and gardens and listed buildings including views to and from these features.*
- *Minimise the potential for further light pollution in future developments.*
- *Conserve and enhance field boundaries including stone walls and hedgebanks.*
- *Conserve and enhance biodiversity to provide corridors and patches within the intensively managed fields.”*

LCA 16: Southern Haven Developed

7.57 As illustrated on **Figure 7.4: Landscape Character Plan**, the Site is located adjacent to the LCA 16: Southern Haven Developed. This LCA is located at the southern shore of the Milford Haven Waterway and comprises the towns of Pembroke Dock at the water’s edge and Pembroke town to the southeast at the eastern end of the tidal reach of the Pembroke River.

7.58 Key characteristics of LCA 16 of relevance to the Site include the following:

- *“Pembroke is an historic town distinctively located on a small ridge and dominated by the outstanding Grade 1 Listed Medieval Pembroke Castle scheduled monument.... Deep rooted historical significance and much is designated as a Conservation Area, set on a rocky outcrop...*
- *Pembroke’s distinctive settlement core pattern as a long narrow main street with some fine buildings and associated burgage plots...*
- *Pembroke Dock established as a garrison town in early 1800’s and as a Royal ship building location has a Conservation Area covering its former royal dockyard, grid pattern planned town, functional relationship with the Waterway and Llanion Hill all of which contribute to a strong sense of place.*
- *Key views in Pembroke are to and from the Castle, along and across the Mill Pond and along Main Street.*
- *The Wales Coast Path and National Cycle Route 4 capitalise on views to Pembroke Castle as well as to the Waterway from the Pembroke Docks barracks (path only) and the park at Llanion and the Cleddau Bridge.*

- *Culturally, the towns lie south of the Landsker Line and form part of English speaking South Pembrokeshire, historically protected by Pembroke Castle."*

- 7.59 There are no specific designations within the LCA relating to its scenic quality, although the traditional terraces of stone cottages, Victorian and Georgian town houses with render and painted pastel provide a strong sense of place. The landscape condition of the LCA is considered to be poor, owing to the extent of urban development and the decline in the built form condition of Pembroke's historic core. The sense of remoteness / tranquillity and overall recreational value is also very limited. The main value of the LCA comes from its historic and cultural heritage whereby it is a historic town distinctively located on a small ridge and dominated by the Grade I Listed Medieval Pembroke Castle. Pembroke Dock is also noted for being established as a garrison town in early 1800's and as a Royal ship building location and has a conservation area covering its former royal dockyard. Overall, the LCA is considered to be of **Medium** value.
- 7.60 The PCLCA identifies landscape changes within Southern Haven developed (LCA 16) including pressure for development on settlement edges, increasing light pollution, decline in built form condition and an increased risk of flooding due to climate change.
- 7.61 Management guidelines identified for LCA 16 include:
- *"Conserve and enhance the setting of Pembroke Castle and its Conservation Area, avoiding inappropriate development.*
 - *Ensure that lighting in future developments is sympathetic and appropriate to its location and minimises impact on the historic environment, biodiversity and character."*

LCA4: Manorbier Freshwater East

- 7.62 As illustrated on **Figure 7.4: Landscape Character Plan**, this LCA is located approximately 300-400m to the east and southeast of the Site with its boundary following the route of the B4584 from Lamphey towards Freshwater. This is a large coastal LCA running eastwards from Stackpole Warren as far as the southern outskirts of Penally, including the coastal villages of Manorbier and Freshwater East.
- 7.63 Key landscape characteristics of LCA 4 of relevance to the Site include:
- *... outstanding values attributed across all five of the evaluated landscape Aspects.*
 - *This area of farmland landscape with traditional built forms predominant in the villages and agricultural buildings is pleasant, with a coastal feel, enhanced by attractive views of coastal cliffs to the east. Hedgerows are especially important landscape elements, providing a tangible link to earlier settlement.*
 - *There are some internationally important habitats present, contributing to the outstanding ecological value of some landscapes.*
 - *There is a very strong historical and cultural sense of place here, which is very different from that encountered in north and west Pembrokeshire, typified by the Medieval open field system which has survived remarkably well in the area - the strip fields which lie either side of the Ridgeway between Lamphey and to the south of St Florence. The wealth of historical and archaeological sites documented means that extensive areas of historic landscapes have an outstanding value attributed to them. Of particular note are the Medieval buildings: the Lamphey Bishop's Palace, a moated house site at Hodgoston and the extremely well preserved manorial landscape of Manorbier, with its imposing castle dominating the village scene, the prominent church and a dovecote.*
 - *The historical value in turn supports the cultural value of this landscape as being outstanding. This has been formally recognised by its inclusion in the Manorbier*

Registered Landscape of Special Historical Interest in Wales. The present-day landscape is one almost wholly shaped by Medieval territorial organisation, settlements and land use. It has associated historical cultural value as the home of Gerald of Wales”.

- 7.64 The value of LCA 4 is considered to be High as it is located within the PCNP which is nationally designated for its natural beauty, unique geology, and recreational opportunities. The LCA is also recognised for its very strong historical and cultural associations.
- 7.65 Aside from these nearby character areas, the terrain and vegetation within the surrounding landscape limits visibility, as illustrated by the ZTV, such that the effects would diminish rapidly with distance. Effects in other character areas would tend to be negligible and are not considered further.

Local Landscape Character: Pembrokeshire Coast National Park Authority, Landscape Character SPG, June 2011⁴

- 7.66 The Special Qualities of the National Park Landscape are set out in Section 6.3 of the SPG. These are “characteristics and features of the National Park which, both individually and in combination, contribute to making the Pembrokeshire Coast National Park unique”. These include, inter alia:
- **Diversity of Landscape:** “features providing tangible links to the past management and use of the land. Traditional hedgebanks are a very important and widespread landscape element, defining field boundaries and producing a characteristic pattern and texture to the landscape, with scattered woods as punctuations points...”
 - **Distinctive Settlement Character:** “...the gradual erosion of the special character of the settlements and buildings through inappropriate or unsympathetic development during the 1960’s and 1970’s, has placed even greater importance upon these Listed Buildings and Conservation Areas....”
 - **Rich Archaeology:** “...The medieval buildings of Lamphey Bishop’s Palace, the moated house at Hodgeston, and the well-preserved manorial landscape of Manorbier, with its castle, church and dovecote, are notable examples....”
 - **Remoteness, Tranquillity and Wilderness:** “...there are areas of the National Park where the sense of tranquillity and peace are engendered from the intimacy and closeness of the landscape.... Part of the special appreciation of the landscape of the National Park is the ability to absorb not only the tranquillity and sense of calm during the day, but also the big skies of the evening and the radiance of the stars in a dark sky on a clear night. Much of the National Park has negligible or slight night-time light pollution....”
 - **Diversity and Combination of Special Qualities:** “...The recurrent sights and sounds of the sea, viewed along with the rolling open coastal landscapes, enclosed wooded valleys, or seen from the high upland ridges and plateaus of the inland hills, create a distinctive combination of colour, texture, contrast and variation within just a few miles....”

⁴ Pembrokeshire Coast National Park Authority in partnership with Countryside Council for Wales, June 2011. Landscape Character Supplementary Planning Guidance, updated September 2020.

Table 7.2: Sensitivity of Landscape Character Receptors Summary

Receptor	Value	Susceptibility	Sensitivity
<p>National Landscape Character Area (NLCA) 48: Milford Haven</p>	<p>The Site is fully located within the Milford Haven NCLA, an area that covers Pembroke in the south-east up to Haverfordwest in the northwest. The Site is located in the southwestern corner of the NLCA, adjacent to NLCA 44: Taf and Claeddau Vales and NLCA 47: South Pembrokeshire Coast. The latter is recognised as a National Park for its exceptional scenic quality, however there is limited intervisibility between the Site and the National Park.</p> <p>The Site itself exhibits some scenic quality as it reflects the characteristic attributes of the Milford Haven NLCA of rolling lowland agricultural landscape with a mosaic of mixed fields bounded by hedgerows. Also characteristic of the NLCA, the Site is influenced by the network of electricity pylons that traverse the landscape. The NCLA exhibits limited remoteness and tranquillity due to the proximity of Pembroke and major transport routes including the B4584 and the A4139 to the south.</p> <p>Within the NLCA and the study area of the Site, there are a number of distinctive features and components that add to the rarity of the landscape, including but not limited to: the Grade I listed ruins of Lamphey Bishops Palace 1km to the northeast; Grade I listed Pembroke Castle 1.8km to the northwest; Pembrokeshire Coast National Park to the southeast; and extensive blocks of ancient woodland – all of which are intrinsically linked with cultural and historical associations throughout Pembroke.</p> <p>There is a high level of recreational value in the NCLA, owing to the presence of public rights of way (particularly National Trails, long distance trails, Coastal Paths and Core Paths) in the locality which link with Pembrokeshire Coast National Park and where an appreciation of the landscape is a feature.</p> <p>Overall, NLCA 48: Milford Haven has distinctive components and characteristics and a High landscape value.</p>	<p>The landform of the NCLA is varied and relatively complex, and includes a low rolling ridge, and river valleys of varying scales. Its composition is also varied, as is the pattern of its woodlands, fields and settlements. Land cover includes grassland, woodland, lowland fens and mixed agriculture which creates a fabric to the landscape. Existing built form and infrastructure also influence the landscape, including electricity pylons and development within Pembroke.</p> <p>The published guidance for the NLCA with regard to development and mitigation can be readily applied within the context of the existing landscape character.</p> <p>The NLCA is likely to be able to accommodate solar development without undue consequences upon its overall integrity. As such, its susceptibility is Low.</p>	<p>Medium</p>
<p>NLCA 47: South Pembrokeshire Coast</p>	<p>The NLCA encompasses the stretch of coastline Pembrokeshire coast from Pendine in the east to the limestone cliffs and bays of the Angle Peninsula in the west and extends inland up to 5km. The Site is located just inland of the NLCA in its central portion, 300m to the north and east at its closest point.</p> <p>The value of NLCA47 is High being broadly aligned with the PCNP which is nationally designated for its natural beauty, unique geology, and recreational opportunities. The</p>	<p>The NLCA comprise a mosaic of cliffs, beaches, wooded estuaries and rolling hills. Within the locality of the Site it is characterised by a network of well-preserved field systems dominated by prehistoric enclosures which impart significant time-depth. In this context solar development within</p>	<p>High</p>

Receptor	Value	Susceptibility	Sensitivity
	<p>National Park has a varied landscape of rugged cliffs, sandy beaches, wooded estuaries and wild inland hills which all contribute to the NLCA's sense of place and natural beauty. The geology of the area is of particular interest with many good exposures both inland and along the coast, exhibiting a variety of rock types and structural features such as natural arches, stacks, rock folding and sea caves. The NLCA also contains the Pembrokeshire Coast Path, much of it at cliff-top level, which is a designated National Trail and provides recreational value to the area. Many of the beaches along the coast also provide opportunity for activities such as surfing, climbing and coasteering.</p>	<p>the NLCA itself would be seen as out of character.</p> <p>However, given that solar development can be achieved without the need for loss of the existing landscape pattern and is generally low profile, NLCA 47 has a Medium susceptibility to solar development.</p>	
<p>NLCA 44: Taf and Claeddau Vales</p>	<p>NLCA 44 covers the larger inland area of Pembrokeshire. The NLCA is approximately 50km wide stretching from Fishguard in the northwest to Carmarthen in the east. The southern limb of the NLCA extends toward the coast at Manorbier. The Site is located 300m from the southwestern tip of this extension.</p> <p>NLCA 44 is a predominantly rural area comprising a series of major river valleys associated with the Taff and Eastern and Western Cleddau. There is a strong sense of remoteness to the NLCA where the main river valleys are fringed in swathes of semi-natural woodland that present an intimate, enclosed character to the valleys, which is compounded by the secluded nature of the rivers that preclude long distance views. There is also a strong sense of time depth in the landscape which also affords high levels of tranquillity due the dispersed settlement pattern of historic villages and hamlets and the lack of large urban centres and other urban influences. The area forms the inland setting to the more established visitor destinations in Pembrokeshire Coast National Park. The NLCA is also noted for containing an array of archaeological sites including prehistoric ritual and funerary monuments, Norman castles and ecclesiastical remains. As such, the value of the NLCA is High.</p>	<p>Other than the urban centres, 2 A roads and overhead lines and pylons leading from Carmarthen the NLCA is largely undeveloped.</p> <p>In this context solar development within the NLCA itself would be seen as out of character.</p> <p>However, given that solar development can be achieved without the need for loss of the existing landscape pattern and is generally low profile, LCA 44 has a Medium susceptibility to solar development.</p>	<p>Medium</p>
<p>Local Landscape Character Area 25: Hundleton and Lamphey</p>	<p>The Site is wholly located within the Hundleton and Lamphey LCA. The LCA is adjacent to the Pembrokeshire Coast National Park but there is very limited intervisibility between the two.</p> <p>Generally, the majority of the LCA is rural comprising an agricultural landscape interspersed by small settlements and rural hamlets. However intensive human activity is evident and <i>"there are vertical elements in places including power lines with pylons running east west to the Pembroke gas power station, wireless masts and small wind turbines which are noticeable on ridge tops."</i> The sense of remoteness and tranquillity of the LCA is further reduced by development within Pembroke and the A477.</p>	<p>The landscape of LCA 25 is undulating with the intervening topography having the potential to screen solar development, particularly in areas featuring woodland. Land cover includes watercourses, grasslands and woodland which creates a fabric to the landscape which could accommodate solar development without undue consequences.</p>	<p>Medium</p>

Receptor	Value	Susceptibility	Sensitivity
	<p>An important contribution is made to the LCA by cultural and historical associations, since the LCA contains Registered Parks and Gardens, Conservation Areas, scheduled monuments and a number of listed buildings. Notably, within the locality of the Site is the Lamphey Conservation Area, Lamphey Bishops Palace scheduled monument, and Lamphey Court Registered Park and Gardens.</p> <p>Recreational activities further enhance the value of the LCA, which is well connected by an extensive network of PRow including through the PCNP. Sustrans national cycle route 4 also passes through the LCA and adjacent to the Site.</p> <p>Overall, the LCA is an area of common components and characteristics that are designated at county or borough level and make some positive contribution to landscape character. The value of the LCA is therefore considered to be Medium.</p>	<p>The outer extents of the LCA are affected by existing settlements. Solar development is already present within the LCA, such that the type of change proposed will not introduce elements that are uncharacteristic.</p> <p>It is likely that the published guidance for the LCA with regard to development and mitigation can be readily applied within the context of the existing landscape character.</p> <p>Based on the above, the LCA is likely to be able to accommodate solar development without undue consequences upon its overall integrity. As such, its susceptibility is Low.</p>	
<p>Local Landscape Character Area 16: Southern Haven Developed</p>	<p>The boundary of this LCA and edge of the settlement of Pembroke is located to the northwest of the Site, approximately 200m from the Site at its closest point, around Merlin's Cross. The LCA mainly comprises settlement.</p> <p>There are no specific designations within the LCA relating to its scenic quality, although the traditional terraces of stone cottages, Victorian and Georgian town houses with render and painted pastel provide a strong sense of place.</p> <p>The condition of the LCA is poor owing to the extent of urban development and the decline in built form condition of Pembroke's historic core.</p> <p>The sense of remoteness / tranquillity and overall recreational value is also very limited. The main value of the LCA comes from its historic and cultural heritage whereby it is an historic town distinctively located on a small ridge and dominated by the Grade I Listed Medieval Pembroke Castle. Pembroke Dock is also noted for being established as a garrison town in early 1800's and as a Royal ship building location and has a conservation area covering its former royal dockyard. Overall, the LCA is considered to be of Medium value.</p>	<p>The Site is located outside of the LCA. Due to the presence of built form, the LCA has Low susceptibility to the type of development proposed.</p>	<p>Medium</p>
<p>Local Landscape Character Area 4: Manorbier Freshwater East</p>	<p>This LCA is located approximately 300m to the east and southeast of the Site. The boundary of the LCA aligns with the B4584 which also defines the PCNP boundary.</p> <p>The value of LCA 4 is High as it is wholly located within the PCNP which is a nationally designated</p>	<p>The LCA (and the PCNP) comprise a mosaic of cliffs, beaches, wooded estuaries and rolling hills. On the northwestern edges of the LCA, in the locality of the Site, it is</p>	<p>Medium</p>

Receptor	Value	Susceptibility	Sensitivity
	landscape for its natural beauty, unique geology, and recreational opportunities. The LCA is also recognised for its very strong historical and cultural associations.	<p>characterised by a network of well-preserved field systems dominated by prehistoric enclosures which impart significant time-depth. In this context solar development within the LCA itself would be seen as out of character.</p> <p>However, given that solar development can be achieved without the need for loss of the existing landscape pattern and is generally low profile, LCA 4 has a Medium susceptibility to solar development.</p>	

Local Landscape Character: LANDMAP Aspect Areas

7.67 LANDMAP maps and classifies landscapes, dividing Wales into discrete geographical areas known as Aspect Areas ('AAs'), each of which is identified by its own landscape characteristics and qualities. There are five LANDMAP spatial datasets:

- Geological Landscape;
- Landscape Habitats;
- Visual & Sensory;
- Historic Landscape; and
- Cultural Landscape.

7.68 For the overall evaluation, each AA is scored on the following scale:

Table 7.3: AA Evaluation Criteria Table

Level	Criteria
Outstanding	Of international or national importance to the Aspect
High	Of regional or county importance to the Aspect
Moderate	Of sub-regional / local importance to the Aspect

7.69 A 2 km study area and 3km search area has been identified based on the extent of landscape aspect or character areas likely to be significantly affected, either directly or indirectly. It is also based on the extent of area from which the Development may be visible, defined by the ZTV.

7.70 The assessment process set out in LANDMAP GN46: *Using LANDMAP in Landscape and Visual Assessments*^x was undertaken in order to filter the AAs and identify those that should be scoped into the assessment, as illustrated by **Figures 7.5 to 7.9**.

7.71 With respect to Geological Landscape, Landscape Habitats and Cultural Landscapes, step 3 of the filter process described in GN46 uses a ZTV, where available, to '*retain all filtered aspect areas that are visible with the development*', with a similar approach at step 2 for Visual and Sensory and Historic Landscapes. This assessment has applied this approach to all the AAs that overlap fully or partially or are adjacent to

the Development boundary and/or have a special relationship with any other AAs identified. Further consideration of specific criteria as set out in GN46 for each AA is also given, and where appropriate, filtered out from the assessment.

7.72 **Tables 7.4 – 7.8** below demonstrate the filtering process applied to all identified AAs located within the 3km search area, and the rationale behind either their inclusion or exclusion from further assessment. Retained AAs most likely affected by the Development have then been assigned value in **Appendix 7.4: LANDMAP Sensitivity** using the same methodology employed throughout this assessment.

Geological Landscape

7.73 The Geological Landscape Aspect of LANDMAP considers the physical, primarily geological, influences that have shaped the contemporary landscape and identifies those landscape qualities which are linked to the control or influence exerted by bedrock, surface processes, landforms and hydrology. The filtered and retained Geological AAs are outlined in **Table 7.4** below and are illustrated in **Figure 7.5: LANDMAP Geological Landscape Aspect**.

Table 7.4: Geological Landscape AA Filtering

Ref	Name	Retained in assessment (Yes / No)	Rationale
PMBRKGL128	Cleddau estuary	No	Not within ZTV
PMBRKGL208	Cosheston	No	Not within ZTV
PMBRKGL219	St. Florence	Yes	Within ZTV and High GL_31 and GL_33 evaluation
PMBRKGL220	The Ridgeway	Yes	Within ZTV and High GL_33 evaluation
PMBRKGL222	Manorbier - Stackpole coast	No	Not within ZTV
PMBRKGL223	Pembroke Dock	No	Not within ZTV
PMBRKGL224	Jameston	Yes	Within the Site
PMBRKGL225	Pembroke	Yes	Within the Site
PMBRKGL227	Pembroke River (estuary)	No	Not within ZTV
PMBRKGL228	Pembroke River	Yes	Within the Site
PMBRKGL229	Thrustle Mill	No	Within ZTV however Low/Moderate GL_31 and GL_33 evaluation
PMBRKGL230	Monkton	No	Not within ZTV
PMBRKGL234	Hundleton	Yes	Within the Site
PMBRKGL242	Stackpole	No	Not within ZTV

Landscape Habitats

7.74 The Habitat Aspect of LANDMAP collects information at various levels and classifies the landscape into areas of distinct Landscape Habitat character. The filtered and retained Landscape Habitat AAs are outlined in **Table 7.5** below and are illustrated in **Figure 7.6: LANDMAP Landscape Habitat**.

Table 7.5: Landscape Habitat AA Filtering

Ref	Name	Retained in assessment (Yes / No)	Rationale
PMBRKLH392	Between Pembroke and Tenby	Yes	Adjacent to Site boundary

PMBRKLH467	Broad Haven - Lydstep Haven	No	Not within ZTV
PMBRKLH470	St. Govans Head - Giltar Point	No	Not within ZTV
PMBRKLH549	Pembroke River Pill	Yes	Within ZTV and High GL_42 and GL_45 evaluation
PMBRKLH573	Stackpole Woodlands	No	Not within ZTV
PMBRKLH586	Pembroke Mill Pond	Yes	Within ZTV and High LH_42 evaluation
PMBRKLH608	N. of Castlemartin	Yes	Within the Site
PMBRKLH671	W. of Freshwater East	No	Not within ZTV
PMBRKLH792	Cosheston Pill	No	Not within ZTV
PMBRKLH808	Barafundle Bay - Manorbier Camp	No	Not within ZTV
PMBRKLH876	Freshwater East Dunes	No	Not within ZTV
PMBRKLH879	Pembroke	Yes	Adjacent to Site boundary
PMBRKLH955	Pembroke Dock	No	Within ZTV however Moderate/Low LH_42 and LH_45 evaluation
PMBRKLH982	N.W. of East Trewent	No	Within ZTV however Moderate LH_42 and LH_45 evaluation

Cultural Landscape

- 7.75 The Cultural Aspect describes the links between landscape and people and focusses on mapping the landscape where it has been, or is being, visibly and recognisably fashioned by a particular cultural activity or process. The filtered and retained Cultural Landscape AAs are outlined in **Table 7.6** below and are illustrated in **Figure 7.7: LANDMAP Cultural Landscape Services**.

Table 7.6: Cultural Landscape AA Filtering

Ref	Name	Retained in assessment (Yes / No)	Rationale
PMBRKCLS111	Martletwy	No	Not within ZTV
PMBRKCLS112	Daugleddau	No	Not within ZTV
PMBRKCLS113	Sageston	Yes	Within ZTV
PMBRKCLS119	The Ridgeway	Yes	Within ZTV
PMBRKCLS120	Manorbier	Yes	Within ZTV
PMBRKCLS122	Castlemartin	Yes	Within the Site
PMBRKCLS123	Stackpole Court	No	Not within ZTV
PMBRKCLS127	Pembroke	Yes	Within ZTV
PMBRKCLS128	Pembroke Dock	Yes	Within ZTV
PMBRKCLS147	St Govan's Head	No	Not within ZTV
PMBRKCLS151	Freshwater East	No	Not within ZTV
PMBRKCLS179	Wooded Valley	No	Not within ZTV
PMBRKCLS201	Estuarine Mud	No	Not within ZTV

Visual and Sensory

7.76 The Visual and Sensory aspect is described as a process of mapping what is perceived through our senses, primarily visually, from the physical attributes of landform and land cover to their visible patterns of distribution and their consistent relationships in particular areas. The filtered and retained Visual and Sensory AAs are outlined in **Table 7.7** below and are illustrated in **Figure 7.8: LANDMAP Visual and Sensory**

Table 7.7: Visual and Sensory AA Filtering

Ref	Name	Retained in assessment (Yes / No)	Rationale
PMBRKVS050	Martletwy	No	Not within ZTV
PMBRKVS051	Daugleddau	No	Not within ZTV
PMBRKVS058	The Ridgeway	No	Within ZTV however Moderate VS_46, VS_48 and VS_50 evaluation and there is little potential for a large magnitude of change
PMBRKVS059	Manorbier	No	Within ZTV however Moderate VS_46, VS_48 and VS_50 evaluation and there is little potential for a large magnitude of change
PMBRKVS061	Castlemartin	Yes	Within the Site
PMBRKVS062	Stackpole Court	No	Not within ZTV
PMBRKVS066	Pembroke	Yes	Within ZTV and High VS_48 evaluation
PMBRKVS067	Pembroke Dock	Yes	Within ZTV and High VS_48 evaluation
PMBRKVS080	St Govan's Head	No	Not within ZTV
PMBRKVS082	Freshwater East	No	Not within ZTV
PMBRKVS091	Wooded Valley	No	Not within ZTV
Estuarine Mud	Pembrokeshire	No	Not within ZTV

Historical Landscape

7.77 The historic aspect defines the Welsh landscape's historic dimension, in which commonplace historic features are ranked alongside long-accepted types of pre-eminent sites and monuments. It also identifies historic land uses, patterns and features that are structurally prominent and contribute to the overall historic character of the present landscape. The filtered and retained Historic Landscape AAs are outlined in **Table 7.8** below and are illustrated in **Figure 7.9: LANDMAP Historic Landscape**

Table 7.8: Historical Landscape AA Filtering

Ref	Name	Retained in assessment (Yes / No)	Rationale
PMBRKHL43874	Pembroke	Yes	Within ZTV and Outstanding HL_40 evaluation
PMBRKHL43875	Pembroke Dock	Yes	Within ZTV and High HL_40 evaluation
PMBRKHL43914	Carew Milton and Nash	Yes	Within ZTV and Outstanding HL_40 evaluation
PMBRKHL43915	Hundleton & Maiden Wells	No	Within ZTV however Moderate HL_40 evaluation and there is little potential for a large magnitude of change
PMBRKHL46076	East Moor and West Moor	No	Within ZTV however Moderate HL_40 evaluation and there is little potential for a large magnitude of change
PMBRKHL46082	Manorbier Newton Strip Fields	Yes	Within ZTV and Outstanding HL_40 evaluation
PMBRKHL46083	Freshwater East to Lydstep	Yes	Within ZTV and High HL_40 evaluation
PMBRKHL46173	Lamphey - Gumfreston	Yes	Within the Site
PMBRKHL46178	Hodgeston	Yes	Within ZTV and High HL_40 evaluation
PMBRKHL46179	Lamphey	Yes	Within ZTV and High HL_40 evaluation
PMBRKHL46180	Freshwater East	No	Within ZTV however Moderate HL_40 evaluation and there is little potential for a large magnitude of change
PMBRKHL46181	Stackpole to Freshwater East Coast	No	Not within ZTV
PMBRKHL46183	Stackpole	No	Not within ZTV
PMBRKHL46190	Castlemartin - St Twynells	Yes	Within ZTV and High HL_40 evaluation
PMBRKHL46191	Orielton	Yes	Within ZTV and Outstanding HL_40 evaluation
PMBRKHL46235	Cosheston	No	Not within ZTV

Landscape Designations

- 7.78 There are numerous landscape designations within the study area as illustrated on **Figure 7.1: Site Context Plan**.
- 7.79 As illustrated on **Figure 7.10: Site Appraisal Plan**, the Grade II listed Alleston Farm building is located within the Site approximately 50m from the northern boundary.
- 7.80 Pembrokeshire Coast National Park is located approximately 300m to the east and southeast of the Site at its closest point. To the east of the Site, the boundary of the PCNP follows the route of the B4584 from Lamphey towards Freshwater.
- 7.81 Lamphey conservation area is located approximately 500m to the east of the Site at its nearest point, and contains the Grade I listed Lamphey Palace scheduled monument, Grade II listed Lamphey Court, a Registered Park and Garden, as well as a number of other listed buildings within the settlement of Lamphey.
- 7.82 Pembroke Town conservation area is located approximately 1km to the northwest of the Site at its closest point, and contains numerous Listed Buildings, including the Grade I listed Pembroke Castle.
- 7.83 The following Ecological designations are also identified within the study area:
- Freshwater East Local Nature Reserve (LNR), 1.4km southeast of the site;
 - Freshwater East Cliffs to Skrinkle Haven Site of Special Scientific Interest (SSSI), 1.4km southeast;
 - Pembroke Mill Ponds LNR, 1.5km northwest;
 - Stackpole Quay-Trewent Point SSSI, 1.5km south;
 - Milford Haven Waterway SSSI, 1.9km northwest;
 - Pembrokeshire Marine Special Area of Conservation (SAC), 1.4km southeast; and
 - Bristol Channel Approaches SAC, 1.5km southeast.
- 7.84 There are four PRoW that run through or adjacent to the Site and connect with an extensive network of PRoW through the area. These are:
- PRoW 32/51;
 - PRoW 32/52 (to be diverted);
 - PRoW 32/68; and
 - PRoW 17/8.
- 7.85 Sustrans National Cycle Route 4 runs adjacent to the northern Site boundary along Lower Lamphey Road between Lamphey and Pembroke Town.
- 7.86 There are numerous areas of ancient woodland within the study area, including Alleston Wood which is located within the Site adjacent to Alleston Farm and connects with a wider tract of woodland that extends to the southwest of the Site.

Site Appraisal

- 7.87 The existing landscape features and field parcels present within the Site are illustrated on **Figure 7.10: Site Appraisal Plan** and in **Appendix 7.2: Site Appraisal Photographs**.

Land Use

- 7.88 The Site encompasses approximately 96ha and comprises 14 agricultural fields with a mix of improved grassland and arable land. The fields are separated by rows of mature hedgerows. Within the eastern region of the Site a collection of fields are currently used for equestrian activities. This is with the exception of Alleston Farmhouse, a Grade II Listed building, and the associated buildings which are located within the centre of the Site.

Vegetation

- 7.89 The fields within the Site are bordered by hedgerows of varying structure. All of the hedgerows within the Site appeared to be subject to some level of management and are generally intact and stockproof. The hedgerows are connected to an extensive network of hedgerows and woodland blocks in the wider area. Species composition within hedgerows varies slightly across the Site. They are generally dominated by blackthorn *Prunus spinosa*, with occasional hazel *Corylus avellana*, bramble *Rubus fruticosus*, ivy *Hedera helix*, common gorse *Ulex europaeus* and hawthorn *Crataegus monogyna*.
- 7.90 Semi-mature and mature trees are present within some of the hedgerows, particularly those along the northern boundary of the Site and along the stream corridor through the northern part of the Site. These trees are predominantly ash *Fraxinus excelsior*.
- 7.91 An area of mature trees and vegetation is located within the southwestern region of the Site and runs into the central region of the Site. This collection of trees is known as Alleston Wood, partly which is defined as ancient semi-natural" on the Natural Resources Wales Ancient Woodland Inventory.
- 7.92 The majority of the specimens on Site are ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), and elm (*Ulmus procera*). The tree survey identified a total of 255 tree features including 162 individual trees, 45 groups of trees, 43 hedges and five woodlands that have the potential to be impacted by the Development.
- 7.93 Thirteen tree features were categorised as high A grade, 97 tree features were categorised as moderate B grade, and 128 were categorised as low C grade. Seventeen tree features were categorised as very low-quality U grade and are not considered a constraint to development.
- 7.94 Chapter 8 Biodiversity describes the habitats and vegetation present within the Site and the Arboricultural Survey submitted in support of the DNS application describes the hedgerows, trees, tree groups and woodland in greater detail.

Water Bodies

- 7.95 There are a number of well vegetated, unnamed streams that cross the Site and align with Alleston Wood and field boundary hedgerows. Within Alleston wood there is also a pond and some marshy grassland areas.

Topography

- 7.96 The Site is comprised broadly of two hills which are separated by a shallow valley with streams and Alleston Wood. The hills ascend in a southerly and southwesterly direction to high points around 63m and 55m AOD respectively, and sit just below a continuous ridgeline immediately to the south of the Site. To the north of Alleston farm the land starts to level out and gently undulate between 25m to 20m AOD to meet along the northern boundary that follows the route of Lower Lamphey Road.
- 7.97 The sense of enclosure within the Site is varied, with long elevated views afforded across the landscape to the north from the more elevated parts of the Site as the land rises towards the southern ridgeline.

7.98 As illustrated in **Figure 3.1: Field Number Plan**, Field Parcels 5-8 lie within the lower northern part of the Site are more enclosed by the flatter nature of the topography and intervening hedgerows, woodland and trees, and to some degree by the Alleston farmstead and numerous outbuildings.

Built Form

7.99 There are prominent overhead 132 kilovolt (kV) powerlines crossing the northwestern region of the Site. The overhead powerlines and towers that support them are approximately 45m in height.

7.100 Grade II Listed Alleston Farm is located within the Site approximately 50m from the northern boundary and is recognised for its special architectural interest as a substantial late Georgian or early Victorian farmhouse. The farmhouse also has a large number of associated outbuildings that are not listed.

7.101 There is one property located immediately adjacent to the Site to the west at Upper Longstone. To the north and northwest of the Site there are also a small number of properties located along Lower Lamphey Road.

Site Access

7.102 The Site is accessible to vehicles from the north via Lower Lamphey Road and from the west via Watery Road along unnamed access tracks.

7.103 Multiple PRoW cross the Site, including one that runs in a north-south direction through the northern area of the Site (SP32/51/1). This connects to a footpath (SP32/52/1) that runs to the western boundary of the Site. This PRoW connects to a bridleway (SP32/68) that borders the west of the Site and runs in a north-south direction. An additional PRoW (SP32/51/2) is located within the southern extent of the Site and connects Alleston Farm within the centre of the Site.

Table 7.9: Sensitivity of Landscape Receptors

Receptor	Value	Susceptibility	Sensitivity
Fields	Agricultural land is a common feature in the immediate, local, and wider landscape. Much of the Site comprises arable/pastoral fields which are interspersed by electricity pylons, and as such exhibits no particular scenic or perceptual qualities beyond its setting that is characterised by a predominantly undulating agricultural landscape near to the settlement edge of Pembroke. The arable/pastoral fields make some positive contribution to landscape character, as such, its value is Medium .	Fields by their nature are generally vulnerable to development, however, the type of development proposed offers the potential to retain the existing field structure. The character of the arable/pastoral fields and immediate setting is eroded by a number of detracting features, influenced by existing energy infrastructure within the immediate and local setting. This landscape feature has some potential to accommodate development of the type proposed without fundamental alterations to the feature as a whole. On this basis the susceptibility of the feature is considered to be Medium .	Medium
Hedgerows	The native hedgerows on the Site are neither designated nor rare and are unlikely to have any wider recognition of value. The layout of the hedgerows broadly follows the historic field pattern and are an important element of local landscape character, reinforcing the irregular field pattern and undulating landform. The condition of hedgerows across the Site varies, with areas of decline and loss.	In general, native hedgerow is considered to be readily replaceable and to have a good potential for retention within a solar farm. The native hedgerow is likely to be able to accommodate development without undue consequences upon its overall integrity. As such, its susceptibility is Low .	Medium

Receptor	Value	Susceptibility	Sensitivity
	They support a number of woody species and tree standards. Overall, the hedgerow makes some positive contribution to landscape character. As such, its value is Medium .		
Cloddiau & earth banks	Cloddiau and earth banks field boundaries are characteristic features of the Site and wider agricultural landscape. They are in varied condition within the Site, frequently in a state of decline. They are therefore considered to have Medium value.	Cloddiau and earth banks are considered to be of Low susceptibility to the type of development proposed as they are likely to be able to be accommodated within the type of development proposed without undue consequences on their existing state. They are therefore considered to have Low susceptibility.	Low
Watercourses & Ponds	Watercourses and water bodies are common within the landscape and have value as habitat corridors and forming part of field boundaries. They are also an important element of local landscape character. Within the Site there is large pond located adjacent to the tract of ancient woodland within Alleston Wood, as well as numerous streams (within Flood Zone 2) which follow the field boundaries although these are not always highly legible, typically set within or alongside hedgerows. Watercourses and ponds within the Site are therefore Medium value.	There is a good potential for the retention of the waterbodies within a solar development structure. The structure of the waterbodies and their relationship to the surrounding context is variable. However, should any of the waterbodies be damaged, diverted or removed, it would not be easy to replace them, and it would take considerable time for them to regenerate their vegetative communities and habitat to match their current condition. The waterbodies are likely to have scope to accommodate solar development without undue consequences upon their overall integrity. As such, their susceptibility is Medium .	Medium
Trees & Woodland	Where woodland and trees occur within the Site and its setting, they are prominent features and reinforce the landscape pattern and landform legibility. They are also an important element of local landscape character. Tracts of ancient woodland are regular features within Study Area. One area of ancient woodland named Alleston Wood is located within the Site and located close to the southernmost Site boundary around Herbertsmoor Farm. Trees and Woodland therefore make a positive contribution to landscape character, and as such are of High value.	In general, there is potential for the retention of native trees and woodland within a solar development structure; and native trees and tree belts hedgerow are considered to be replaceable, although take time to mature. The native trees and woodland are likely to have some scope to accommodate solar development without undue consequences upon their overall integrity, and as such their susceptibility is Medium .	High
The Site and its Immediate Context	The Site exhibits: A degree of scenic quality, owing to the rolling nature of the landform on which sits arable/pastoral fields interspersed by hedgerow and woodland.	The type of development proposed would result in a change of landcover, with scope to retain the landscape pattern and composition without undue effects on the overall integrity of the fields. There is potential for the appropriate mitigation associated	Medium

Receptor	Value	Susceptibility	Sensitivity
	<p>Limited remoteness and tranquillity due to proximity of Pembroke to the southwest and transport corridors such as a railway line, the B4584, and the A4139; Alleston Farm in the vicinity of the Site; and the numerous existing electricity pylons / energy infrastructure that dissect the landscape and lower the overall landscape condition.</p> <p>A degree of distinctiveness which contributes to the sense of place experienced within Pembroke. The Site comprises no unusual elements or features, however, is representative of the characteristic attributes of the Milford Haven NLCA of rolling lowland agricultural landscape with a mosaic of mixed fields bounded by hedgerows which confer a strong sense of identity.</p> <p>The Site contains a block of ancient woodland, located adjacent to the Grade II listed Alleston Farm building which is recognised for its special architectural interest as a substantial late Georgian or early Victorian farmhouse. As such, these natural, cultural / historical associations enhance the value of the Site.</p> <p>Some recreation value, with a number of existing PRoW that traverse the Site and connect with the Pembrokeshire Coast National Park. Within the immediate vicinity of the Site there is also the Sustrans Cycle Network along Lower Lamphey Road.</p> <p>Overall, the character of the Site and its immediate vicinity comprises common components and characteristics. Whilst the Site itself is undesignated, parts of the Site and its immediate vicinity make a positive contribution to landscape character. As such, its overall value is considered on balance to be Medium.</p>	<p>for the type of development proposed with opportunity to reinforce and strengthen the existing landscape character in line with policy guidelines. On this basis, the Site is considered to be of Medium susceptibility.</p>	

Visual Appraisal

- 7.104 A visual appraisal was undertaken to determine the relationship of the Site with its wider surroundings, its intervisibility within the wider landscape, and the visual receptors likely to be affected by the Development. The visibility of the Site within the wider landscape provides a basis for consideration of the likely significant effects that the Development will have on views, and the landscape and visual characteristics of the area.
- 7.105 The visual appraisal was undertaken from publicly accessible viewpoints within the surrounding landscape, primarily roads and footpaths, to determine the approximate extent of the area from which the Site is visible from the eye level of a person standing on the ground. The visibility of any Site is

predominantly influenced by landform and the extent and type of vegetation cover and built elements within the Site and the surrounding landscape.

7.106 In order to represent the nature of identified views, Site Context Photographs 1 to 26 were selected from those taken during the visual appraisal fieldwork, including near distance views in and adjacent to the Site and long-distance views from up to 2km from the Site. The fieldwork was undertaken in November 2023, December 2023 and February 2024 and these views represent a ‘worst case’ scenario, illustrating views before leaves are visible when vegetation is more open. Annotated representative photographs are included in **Appendix 7.3: Site Context Photographs**, with additional photographs illustrating the character of the Site in **Appendix 7.2: Site Appraisal Photographs**. The locations from which the Site Context Photographs were taken are illustrated on **Figure 7.11: Visual Appraisal Plan**. The following visual receptors are represented by the Site Context Photographs

Table 7.10: Representative Visual Receptors

Visual Receptors	Approx. distance from the Site	SCP
Within the Site and Immediate Context		
Users of PRoW 32/51/1	Within the Site	1, 2, 7
Users of PRoW 32/51/2	Within the Site	6
Users of PRoW 32/52	Within the Site	3 - 5
Motorists of Lower Lamphey Road	Along Sites northern boundary	9 - 11
Recreational Users of Lower Lamphey Road / Sustrans Cycle Route 4	Along Sites northern boundary	9 - 11
Residents of Lower Lamphey Road	Along Sites northern boundary	9
Users of Watery Lane and PRoW 32/68	Along Sites western boundary	12
Residents of Upper Longstone	Adjacent to Sites western boundary	5
Short Range Views		
Mid-Range Views		
Users of Upper Lamphey Road Users of PRoW 32/57 Users of PRoW 32/56	222m north	13 & 14
Residents at Bishops Park Residents at Margaretes Way Residents at Crickmarren Close	250m north	14 & 15
Residents at West Hill within Lamphey	300m east	10 & 17
Users of Grove Way at Pembrokes southeastern settlement edge	650m west	16
Users of PRoW 17/8	310m southeast	22
Motorists of B4584	800m southeast	23
Visitors of Lamphey Court	950m north-east	18
Long Distance Views		
Users of PRoW 32/58	1.16km northwest	20
Motorists of Deer Park Lane and Dill Road	1.18km north	19
Users of PRoW 17/4	1.67km northeast	21
Visitors of Pembroke Castle	1.81km northwest	25
Users of Chapel Lane within the PCNP	1.25km southeast	24
Users of the Ridgeway including Sustrans Cycle Route 4	2km east	26

7.107 The Site is located within a landscape that exhibits a mix of openness and enclosure due to the nature of the topography and intervening vegetation. As illustrated on **Figure 7.1: Zone of Theoretical Visibility** the Site is located on north and northeast facing slopes beneath an east-west trending ridgeline. The

slopes face across a valley towards rising slopes that form another east-west trending ridgeline. The height of these ridgelines typically limits the potential for views of the Site in the wider landscape.

- 7.108 As illustrated by **Site Context Photograph 1**, from within the Site along PRoW 32/51/1, open views of the rolling agricultural land of Field Parcels 2 and 3 are experienced but are contained by the localised ridgeline to the south which curtails views of Field Parcel 4 at the wider landscape to the south. The residential property, Upper Longstone, is a visible built feature which sits on top of the ridgeline, meanwhile large-scale electricity pylons extend into the skyline of views to the west. As illustrated by **Site Context Photograph 2**, views into the Site from along PRoW 32/51/1 outside of the Site boundary are limited by intervening hedgerows and trees.
- 7.109 As illustrated by **Site Context Photograph 3a**, the route of PRoW 32/52, which traverses the Site from Alleston Farm westward toward Upper Longstone, is contained by varying levels of vegetation. However, **Site Context Photographs 3b** and **4** demonstrate views of the lower areas of the Site to the north, which includes Field Parcels 1, 2 and 3, are afforded at breaks in the planting and are experienced as part of panoramic views of the wider Pembroke valley landscape. Within these views, properties at Pembroke's eastern settlement edge are visible in the background beyond intervening field boundaries, as are the residential properties along Lower Lamphey Road and Upper Lamphey Road. Electricity pylons extend into the skyline and across the full extent of these views.
- 7.110 As shown in **Site Context Photograph 5**, open views to the south and southeast are also afforded at breaks in the planting along PRoW 32/52 where Field Parcels 9, 10 and 11 are experienced in the context of Alleston Farm and its numerous outbuildings. The settlement of Lamphey can also be seen in the background of the view, as well as the wider landscape to the north.
- 7.111 **Site Context Photograph 6** illustrates the views observed from PRoW 32/51/2 within the Site where it meets PRoW SP17/8 at the Sites southerly most point. As illustrated, from along the PRoW there are open views of Field Parcel 11 which descends west into a well treed valley where the diverted footpath will be aligned. Views further north towards Alleston Farm and the Pembroke valley are obstructed by the localised ridgeline and intervening landform. The existing footpath appears to be rarely used as there is no clear route and its access point to the south is overgrown with vegetation.
- 7.112 As illustrated by **Site Context Photographs 7a** and **8**, views from along the PRoW near Alleston Farm are generally well contained by the vegetation within Alleston Wood. **Site Context Photograph 7b** however demonstrates that more open views of the Site are afforded at breaks in planting.
- 7.113 **Site Context Photograph 9** is most representative of the views experienced from the north immediately adjacent to the Site along Lower Lamphey Road and the Sustrans Cycle Route. Views of the Site from the road and its properties are mostly screened by the hedgerow and hedge tree planting along the Sites northern boundary whereby views are limited to between gaps in the vegetation. As illustrated by **Site Context Photograph 10**, however, there are more open views of the Site afforded from along the road where existing gated access to both the Site and adjacent fields is provided. In these views, the rolling north and northeast facing slopes of the Site are observed in the context of the wider agricultural landscape which is dissected by hedgerow and hedge tree planting. As illustrated by **Site Context Photograph 11**, there are also channelled views down the access road which leads to Alleston Farm where the Grade II listed farmstead and numerous outbuildings are observed against the rolling landform backdrop.
- 7.114 Immediately adjacent to the Site to the west, views from Watery Lane and PRoW 32/68 are screened by the roadside vegetation, as illustrated by **Site Context Photograph 12**. However, open views of the Site are obtained from the property Upper Longstone where PRoW 32/52 also begins. As shown in **Site Context Photograph 5**, the views across large parts of the Site are experienced in the context of the wider Pembroke valley, meanwhile Alleston Farm, Lamphey and the electricity pylons are also visible built features. From further west, views of the Site are predominantly curtailed due to the nature of the topography and screening effect of the existing vegetation.
- 7.115 Mid-range views of the Site are presented from within the Pembroke valley along Upper Lamphey Road – from which branches PRoW 32/55 and 32/56. **Site Context Photographs 13** and **14** are representative of these views, whereby beyond intervening arable fields, boundary vegetation and residential properties, the upper extents of the Sites north and northeast facing slopes form an undulating rural backdrop to the views. However, as illustrated in **Site Context Photograph 14**, the electricity pylons and their linking

overhead cables are detracting built features in the view that dominate the skyline. Similar views of the Site are likely to be experienced from the rear of the properties along Bishops Park, Margaretes Way and Crickmarren Close at Pembroke's settlement edge, yet will be filtered by existing belts of vegetation along the railway line. Views from the residential streets in general are curtailed by the intervening properties, as seen in **Site Context Photograph 15**. The ZTV also indicates visibility around Grove Hill and Lowless Close to the west, however as demonstrated by **Site Context Photograph 16**, views are limited due to the density of intervening vegetation including trees and tall hedgerow boundaries.

- 7.116 **Site Context Photograph 10** is generally representative of the nature of the views from the edge of the settlement of Lamphey. Intervisibility from within the settlement however, and particularly the conservation area, is very restricted as visibility tends to be related to the later development at its southwestern edge around West Hill Close. As illustrated in **Site Context Photograph 17**, these developments screen views from the conservation area beyond. The Lamphey conservation area extends northwards from the settlement itself to include the grounds of the Registered Park and Garden, Lamphey Court, and the scheduled monument Bishops Palace. However, as illustrated by **Site Context Photograph 18**, views of the Site from Lamphey Court are limited due to a combination of distance and belts of mature trees along Upper Lamphey Road.

- 7.117 **Site Context Photograph 19** is representative of the views experienced from along Deer Park Lane and Dill Road which run along the ridgeline of the northern slope of the Pembroke valley. As illustrated, views towards the Site from along the road are generally very limited due to containment provided by roadside hedge planting. At points along the road, however, where there is gated access to fields and descending access roads, more open views of the landscape are experienced. As illustrated in **Site Context Photograph 19**, views from these elevated positions are generally channelled down the access roads which are edged by belts of planting, yet the Site is clearly visible in the background of the view and forms part of the wider agricultural landscape that is contained by the east west trending ridgeline. The electricity pylons and their linking overhead cables are also detracting built features in the view which dominate the skyline. As illustrated in **Site Context Photograph 20**, similar views of the Site are also experienced from along PRoW 32/58 which is located south of Dill Road, however views from the footpath are more influenced by the built form within Pembroke.

- 7.118 **Site Context Photographs 22 and 23** illustrate views from the edge of the Pembrokeshire Coast National Park along the B4584. Whilst the ZTV indicates some intervisibility, in reality it is very limited due to the nature of the intervening topography, separation distances and successive layers of screening provided by boundary vegetation and buildings. Further from within the National Park, views of the Site are curtailed by the intervening landform and field boundary vegetation, as demonstrated by **Site Context Photograph 24**.

- 7.119 The ZTV shows that there is very limited intervisibility from within Pembroke and its historic core, although as demonstrated by **Site Context Photograph 25**, there are distant views observed of the Site from the Pembroke Castle turrets. In these panoramic views, the upper extents of the Site are only discernible in the background beyond the intervening development within Pembroke. The electricity pylons that run through the Site and the wider landscape beyond are also visible built features.

Table 7.11: Sensitivity of Visual Receptors

Receptor	Value	Susceptibility	Sensitivity
Users of PRoW 32/51/1	Medium	High	Medium
Users of PRoW 32/51/2	Medium	High	Medium
Users of PRoW 32/52	Medium	High	Medium
Motorists of Lower Lamphey Road	Medium	Low	Medium
Recreational users of Lower Lamphey Road / Sustrans Cycle Route 4	High	Medium	Medium
Residents of Lower Lamphey Road	Low	High	Medium
Users of Watery Lane / PRoW 32/58	Low	High	Medium
Residents at Upper Longstone	Medium	High	High
Users of Upper Lamphey Road	Low	Medium	Medium

Users of PRoW 32/57 and 32/56	Low	High	Medium
Residents at Bishops Park, Margaretes Way and Crickmarren Close	Low	High	Medium
Residents of West Hill within Lamphey	Low	High	Medium
Users of Grove Way at Pembrokes southeastern settlement edge	Low	Low	Low
Users of PRoW 17/8	High	High	High
Residents at West Hill within Lamphey	Low	High	Medium
Motorists of B4584	High	Low	Medium
Visitors of Lamphey Court	High	High	High
Users of PRoW 32/58	Medium	High	Medium
Users of Deer Park Lane and Dill Road	Low	Low	Low
Users of PRoW 17/4	High	High	High
Visitors of Pembroke Castle	High	High	High
Users of Chapel Lane within the PCNP	High	Medium	Medium
Users of The Ridgeway / Sustrans Cycle Route 4	High	Medium	Medium

Future Baseline

- 7.120 With respect to the future baseline for the Site and its immediate context, it is assumed that arable and equestrian use would continue. It is likely that the trend of decline evidenced by some unmanaged hedgerows would persist. The existing trees and woodland within the Site comprise mature trees and ancient woodland, with few successional trees to replace the existing vegetation. Therefore, in the long term (approximately 10 to 20 years) the landscape would likely become more open as woodland and tree groups climax.
- 7.121 The Site and its surrounding context is unlikely to be subject to any notable development pressure, however there may be pressures to extend the settlement edges of Pembroke and Lamphey and applications for other renewable energy developments. Were the Development not to proceed, it is likely that the Site would remain in agricultural and equestrian use, with little change to the landscape baseline other than the general trend of decline and climax described above subject to maintenance and future planting.
- 7.122 However, should renewable energy development in general not proceed, the growing threats to the landscape resulting from current and predicted climate change are well understood. These include more extreme weather events, greater impact from pests and diseases, native species decline and threat from non-native species leading to the long term and chronic decline of biodiversity and habitat loss. Whilst the Development does not by itself prevent or reverse the changes resulting from climate change, the Welsh Government has declared a climate emergency, and renewable energy projects make a valuable contribution to the legal target of reducing greenhouse gas emissions and as such a positive planning framework is in place.

Design Rationale

7.123 The landscape and visual assessment described above has underpinned the identification of opportunities for and constraints to solar development that in turn have informed and influenced the scheme proposals. Reflecting the themes set out in Designing for Renewable Energy in Wales (DREW), these landscape and visual opportunities and constraints have helped to establish clear design principles and objectives to create a development that complements the qualities of the existing landscape of the Site and its surroundings.

Table 7.12: Landscape and Visual Opportunities and Constraints

DREW design Considerations	Opportunities	Constraints
Location	<p>The Site area is non-designated, provides a gradient and slope suitable for solar orientation and has appropriate connection to the national power grid.</p> <p>The power lines which enable grid connection are a notable feature of the landscape reducing its visual cohesion and perceived tranquillity. As such this is a location where energy infrastructure is already a feature of the landscape.</p> <p>In addition, masts, chimneys, wind turbines, solar farms, railways and roads contribute urbanising features to the otherwise rural landscape.</p> <p>There is potential for grassland biodiversity enhancement at ground level and retention of farming uses within the Site.</p>	<p>There are a number of national statutory designated sites for heritage, nature conservation and protected species within the Site and the Study Area: Pembroke Coast National Park, Lamphey conservation area, Lamphey Bishops Palace, Lamphey Court Registered Park and Gardens, Pembroke Castle.</p> <p>PRoW network through the Site to be retained or appropriately diverted.</p>
Response to Scale	<p>There is capacity within the rolling landscape and medium-scale field pattern of the Site to assimilate responsively designed solar development, with potential to disperse “fields” of solar panels within a structure of strengthened field boundaries.</p>	<p>The scale and pattern of the proposed solar parcels should reflect existing landscape patterns and field sizes.</p>
Perimeter Screening	<p>There is potential to provide effective local screening through appropriately strengthening and adding to existing hedgerows as part of an enhanced green infrastructure.</p>	<p>Pembroke Coast National Park, Lamphey conservation area, Lamphey Bishops Palace, Lamphey Court Registered Park and Gardens, Pembroke Castle are within the setting to the Site.</p> <p>Provide screening, in particular on the perimeters of the Site, to protect these features and their setting.</p>
Colour	<p>The colour of the panels to be finished in a colour which is complementary to the surrounding landscape and avoids contrasting tones.</p>	<p>Substantial part of the development comprises new planting. This will reflect the existing palette of native species in the local area and thereby reflect local colour patterns.</p>
Local Environmental Impacts	<p>There is potential to provide extensive areas of green infrastructure around and through the</p>	<p>Proposals should seek to minimise adverse effects on the landscape character or special qualities of the</p>

	<p>Site that would retain and enhance the existing landscape framework.</p> <p>Biodiversity measures can be incorporated to provide a net benefit including new water features and habitats.</p> <p>Solar development provides an opportunity to conserve and enhance field boundaries including stone walls and field banks, reversing loss within Hundleton and Lamphey LCA.</p>	<p>Pembrokeshire Coast National Park such as its sense of remoteness, tranquillity and wilderness.</p> <p>Be sensitive to the residential property Upper Longstone at the Site’s western boundary.</p> <p>Respect the setting of Alleston Farm Grade II listed building by retaining traditional farmland uses in views towards the farmstead southwards from Lower Lamphey Road and westwards from the PCNP.</p> <p>Preserve the landscape setting of surrounding historic settlements including Pembroke and Lamphey and have no unacceptable adverse visual impacts on the communities.</p> <p>Minimise potential for light pollution.</p> <p>Furthermore, proposals should not disturb or otherwise harm protected species or their habitats, or the integrity of other habitats, sites or features of importance to wildlife and individual species. Provide set-back from hedgerows water courses and areas of woodland.</p> <p>Protect the ancient woodland and TPO trees within the Site.</p> <p>Retain and protect the traditional earth banks (Cloddiau)</p>
<p>Cumulative Impacts</p>		<p>Existing solar farms are considered (in the published LCA) to be prominent from adjoining ridges with “ragged edges” and low boundary planting which fails to screen them. Ensure that siting, scale and landscape proposals assimilate new solar development such that the landscape does not become further characterised by poorly integrated energy infrastructure. Ensure that the capacity of the largely open landscape is not exceeded.</p>

Likely Significant Effects

- 7.124 The assessment of landscape and visual effects is based on the description of the Development included within Chapter 3 Site and Development Description, including the proposed landscape and ecological mitigation measures as set out on the Landscape Strategy Plans and Planting Schedule and Notes (**Figure 7.12**). A summary of the effects identified is set out below, with receptors identified that are likely to experience effects that are considered significant (Moderate or Major) during the construction phase. The assessment of likely landscape and visual effects are described in detail in **Appendix 7.5: Landscape Effects Table** and **Appendix 7.6 Visual Effects Table**.
- 7.125 The proposals have been developed as part of an iterative process of design and assessment taking into consideration the guidelines set out in *Designing for Renewable Energy in Wales* SPD. Opportunities and constraints identified in the baseline landscape and visual assessment have been embedded into the design, in order to safeguard features of landscape and visual sensitivity, maximise the potential for beneficial effects, and respond to local planning policy and guidance. These themes are developed in further detail in the landscape design proposals, as described under the description of the Completed Development below.

Construction Phase

- 7.126 As a result of the construction activities associated with the Development, there will be a direct change in land use of the Site, albeit in general, the existing grassland and vegetation will remain. Construction activities will introduce movement and activities associated with vehicles, machinery and stockpiling of materials across the Site over the construction phase, anticipated to span approximately 9 months.

Construction Phase Landscape Effects

- 7.127 The construction activities include the erection of solar panels, a substation, and the associated infrastructure, as well as movement of plant, machinery and people, and introduction of construction compounds and temporary HGV access tracks required for construction. It is considered that a Medium magnitude of effect is likely to be experienced for the Site as a whole and its comprising arable/pasture fields, which are both of Medium sensitivity, resulting in a Moderate Adverse significance of effect during construction. Approximately 55ha of the Site will remain free of construction activity. Although the construction period is short term and expected to span over the course of approximately 9 months, the scale of Site and overall extent of the opaque built elements associated with the Development that create a solid appearance in the landscape will result in the partial loss of a valued characteristic of the Site and its character - the open nature of the rolling agricultural landscape.
- 7.128 With respect to the landscape character areas and landscape AAs, whilst some adverse effects will be experienced, as described in **Appendix 7.5: Landscape Effects Table**, these will not constitute significant effects. An exception relates to the Site Character and Its Immediate Context, whereby as a result of the construction activities, a Medium magnitude of effect will arise, resulting in a Moderate Adverse significance of effect. The construction plant, machinery and activity will introduce uncharacteristic components into eight of the Sites fourteen fields. As such, there will be some temporary loss of the openness of the Site and a reduced sense of tranquillity and rurality.

Construction Phase Visual Effects

- 7.129 Visual effects that are likely to occur during the construction phase relate to the movement of machinery and equipment within the Site, installation of the framework and solar panels, groundworks, material storage, removal of existing vegetation for permanent and temporary access tracks, site compounds and welfare facilities, fencing, hoarding and signage. The most visually prominent construction work is associated with the substation, where more extensive earthworks and retention are required.
- 7.130 The effects on visual receptors were assessed on the basis of 26 representative viewpoints, representing a range of receptors including local residents, the users of roads and footpaths, and visitors of nearby designated assets including the PCNP. A summary of the effects identified is set out below, with four visual receptors identified that are likely to experience effects that are considered significant (Moderate or Major) during the construction phase. Detailed descriptions supporting the visual assessment are provided in **Appendix 7.6: Visual Effects Tables**.

- 7.131 PRow 32/51/1 passes through the Site alongside the eastern boundary of Field Parcel 2 towards Alleston Farm. Users travelling along the public footpath within the Site and outside of the Alleston Wood confines will experience open and direct views of the construction activity occurring within Field Parcels 2, 3 and 4. Views of the construction activity will dominate large parts of the view as illustrated in **Site Context Photograph 1**, however the duration will be short-term (approximately 9 months) and temporary. As such, the overall magnitude of effect is judged to be Medium with a Moderate Adverse significance of effect.
- 7.132 The existing PRow 32/51/2 passes through the Site through Field Parcels 9 and 11 towards Alleston Farm. Users travelling along the diverted public footpath will experience open and direct views of the construction activity occurring within Field Parcels 9 and 11. Views of the construction activity will dominate large parts of the view as illustrated in **Site Context Photograph 10**, however the duration will be short-term (approximately 9 months) and temporary. As such, the overall magnitude of effect is judged to be Medium with a Moderate Adverse significance of effect.
- 7.133 PRow 32/52 passes through the Site along the east to west ridgeline between Field Parcels 3 and 4. Users travelling along the public footpath will experience oblique and filtered views of the construction activity occurring within Field Parcel 4 to the south and those occurring in the lower parts of the Site in Field Parcels 1, 2 and 3 to the north. Views of the construction activity will dominate large parts of the view, however, the duration will be short-term (approximately 9 months) and temporary. As such, the overall magnitude of effect is judged to be Medium with a Moderate Adverse significance of effect.
- 7.134 Residents of the properties along Lower Lamphey Road, adjacent to the Sites northern boundary, are likely to experience significant effects during the construction phase. Views of the construction activity will be filtered by the existing hedgerow and hedge tree planting along the Sites northern boundary. However, where visible at breaks in the planting and particularly from the upper storeys, the construction activity occurring within the more elevated areas of the Site will be noticeable. Lower Lamphey Road will also be subject to incoming and outgoing vehicle traffic associated with the construction phase. The duration will be short-term (approximately 9 months) and temporary. As such, the overall magnitude of effect is judged to be Medium with a Moderate Adverse significance.
- 7.135 The residential property Upper Longstone is located adjacent to the Sites western boundary along Watery Lane, and presently experiences mostly unrestricted visibility over the Site and the wider landscape to the east. There will be a noticeable change in the view experienced from the rear of the property and particularly its upper storey. Due to the elevated position of Upper Longstone in relation to the Site, and a proposed 100m offset, the construction activity will only introduce uncharacteristic components into the lower extents of the view and will not obstruct outward visibility to the wider Pembroke valley landscape. The duration will be short-term (approximately 9 months) and temporary. As such, the overall magnitude of effect is judged to be Medium with a Moderate Adverse significance.

Completed Development

- 7.136 The Development is considered to be temporary and reversible due to the operational lifespan of the Development (40 years), without any permanent adverse effects on landscape character and visual amenity resulting from the Development. That said, significant effects will arise during the operational phase. With respect to visual amenity, it is recognised that although the Development is temporary, it is also long-term.
- 7.137 The majority of the Development comprises a low, uniform height that is ground mounted and fits within existing field boundaries, albeit over a large area within eight of the Sites fourteen agricultural fields. This will result in a change in land use within the existing field pattern, temporarily introducing structures into agricultural fields, but with limited proposed removal of existing landscape features such as hedgerows, trees and woodland, to accommodate access.
- 7.138 The more prominent elements of the Development include the substation, transformer stations and associated equipment which requires cut and fill earthworks. Development will also include CCTV, fencing and gates.
- 7.139 Primary or inherent mitigation measures that have been embedded into the design of the Development include the reduction of the Site extents and the creation of setbacks to reduce the likely adverse effects on sensitive receptors, in particular users of the Sustrans National Cycle Route; residents of the property

Upper Longstone; and existing landscape features, including water courses, hedgerows, trees and woodland.

- 7.140 A Landscape Strategy has been prepared that incorporates landscape and ecological mitigation measures into the Development and has been informed by the strategy and guidelines of the landscape as set out by the LANDMAP assessment and local planning policy and by ecology and tree surveys and recommendations, as illustrated by **Figure 7.12 Landscape Strategy Plan**.
- 7.141 The Landscape Strategy seeks to retain, reinforce and replace landscape features that are characteristic of the local landscape.
- 7.142 With respect to the built elements and infrastructure, where practicable fencing will comprise timber posts and wire mesh stock proof fencing which is in keeping with the prevailing characteristics of the area, with palisade fencing only specified where required for security, enclosing the substation, typically located away from public viewpoints.
- 7.143 The siting of more visually prominent elements, such as the substation facility has been carefully considered to reduce the landscape and visual effects of this larger infrastructure, particularly in relation to higher sensitivity receptors.

Landscape Strategy

- 7.144 As illustrated on the Landscape Strategy Plan (**Figure 7.12**), the Development includes the following mitigation measures:
- Existing hedgerows surrounding and within the Site will be retained and enhanced (through gapping up and enhanced management). Internal field boundary hedgerows will be encouraged to fill out and maintained at a minimum height of 2.5 – 3m. Over 1.5km of proposed native hedgerow will be planted to gap up and reinstate field boundaries and enhance habitat connectivity within the Site. In targeted areas, hedgerow trees will also be allowed to grow to provide visual screening of the Development;
 - Approximately 2.66ha of native woodland planting is proposed, including sessile oak *Quercus petraea*, downy birch *Betula pubescens* and rowan *Sorbus aucuparia* in line with the Ecologist's recommendations. Woodland is located where it will enhance the existing landscape character and provide some visual screening of the Development;
 - 0.08ha of orchard planting is proposed which will provide considerable biodiversity benefits, as well as enhancing the historic character of the Grade II Listed Alleston Farm;
 - A minimum of 100m buffer has been proposed from the property Upper Longstone at the Sites western boundary. No solar infrastructure will be built within the buffer, and will be situated on the lower extents of the north facing slope as to preserve views out toward the Pembroke valley landscape from Upper Longstone;
 - Solar panels and fencing will be set back from the northern Site boundary whereby there will be no solar infrastructure built within Field Parcels 5 and 7 as to protect views towards and the setting of the Grade II Listed Alleston Farm; and
 - A greater range of grassland types are proposed, with the fencing associated with the Development enabling changes in management regimes for different parts of the Site that would benefit from less intense grazing to encourage greater species diversity. The Landscape Strategy includes the preparation and seeding of existing grassland and changes in management regimes to achieve less agriculturally improved areas; hay meadow; rough tussocky grassland and marshy grassland.

Glint and Glare

- 7.145 A Glint and Glare Assessment (GGA) has been prepared by Pager Power (**Appendix 7.8**), to assess the potential effects arising from the Development on surrounding receptors including road users, residents and aviation.
- 7.146 The study defines glint and glare as follows:
- Glint – a momentary flash of bright light typically received by moving receptors or from moving reflectors; and
 - Glare – a continuous source of bright light typically received by static receptors or from large reflective surfaces.
- 7.147 These definitions are aligned with those presented within the National Policy Statement for Renewable Energy Infrastructure (EN-3) – published by the Department for Business, Energy & Industrial Strategy in November 2023 and the Federal Aviation Administration in the USA. The study also notes that solar reflections from solar panels are equal to or less than those from water. It also notes that *'reflections from solar panels are significantly less intense than many other reflective surfaces, which are common in an outdoor environment.'*
- 7.148 For road safety and residential amenity receptors, a 1km study area was deemed appropriate and consideration of receptors within 500m of panel areas is appropriate for glint and glare effects on railway operations and infrastructure.
- 7.149 65 residential receptors were identified within 1km of the Development. The modelling has shown that solar reflections are geometrically possible towards 58 of the 65 assessed dwelling receptors. The report summarises that *'no significant impacts are predicted on any of the assessed dwellings, because where solar reflections are geometrically possible, there is significant screening such that views of reflecting panels are not expected to be possible in practice, or there are significant factors such as:*
- Significant clearance distance between the observer and the closest reflecting panel; and
 - Reflections possible when the Sun is relatively low in the sky beyond the reflecting panels.'
- 7.150 Only one road within the 1km assessment area met the assessment criteria, the A4139 which runs from the east into Lamphey. However, the study notes how the road is clearly screened by intervening buildings, vegetation, and terrain. The road was not taken forward for technical modelling. Therefore, no significant effects are predicted on road safety, and no mitigation or further assessment is recommended.
- 7.151 The railway line located approximately 160m north of the Site was considered in the study, however it notes there are no sections of railway line within the typical 500m assessment area for railway operations and infrastructure, therefore technical modelling was not undertaken. It was therefore concluded that the effects of glint and glare would not have a significant impact upon the safety of railway operations. Mitigation is not recommended.
- 7.152 Rosemarket Airfield is an unlicensed airfield located within 10km of the Development. Significant effects are not predicted on aviation activity associated with Rosemarket Airfield based on the associated guidance and industry best practice.
- 7.153 Overall, the study concludes that no effects requiring mitigation are predicted on surrounding road safety, residential amenity, railway operations and infrastructure, and aviation activity.

Landscape Effects of the Completed Development (Year 1)

- 7.154 The completion of the Development will introduce solar panels into less than half of the Sites 96ha, as well as a substation and the associated infrastructure. The Development will also introduce extensive new planting and a change in management regimes of the existing vegetation. It is considered that two landscape receptors will experience effects that are considered significant.

- 7.155 The arable character and open nature of the Fields will be lost as a result of Development extending across the rolling landscape pattern. The Development will introduce solar panels and associated infrastructure, including a substation. The landscape strategy includes the introduction of gapping up, positive management and replanting of hedgerows which will in turn reinforce and reinstate the existing landscape structure. With consideration to the overall massing of the Development and as the proposed structural planting will not have established by Year 1, it is considered that the nature of change will result in a Medium magnitude and a Moderate Adverse significance of effect.
- 7.156 The Development will introduce solar panels and associated infrastructure, including a substation into existing open fields. The substation and access tracks will require earthworks and areas of hardstanding, but the rest of the Development will be ground mounted over the existing grassland fields, retaining some of the existing character of the fields, and potentially continuing to be used for grazing. There will be very limited and localised removal of landscape features (hedgerows and trees) that define field boundaries to accommodate access and construction, the majority of which has been located to avoid existing landscape features.
- 7.157 The proposed landscape and ecology strategy will establish approximately 2.66ha of native woodland, reinstate mixed native hedgerows and create new areas of scrub, wet meadow and SuDs, with changes in grassland management to improve biodiversity and habitat connectivity within the Site. Approximately 1.5km of mixed native hedgerows will be planted and managed within grassland / ruderal vegetation margins which will in turn reinforce historic field boundaries and reinforce the local landscape pattern. 0.08ha of orchard planting is also proposed which will greatly enhance biodiversity. However, structural planting will not have fully established by Year 1 and due to the scale of the Site and opaque nature of the built elements of the Development alongside new planting measures there will be a loss of open nature of the fields along with a change in land use, resulting in a Medium magnitude and a Moderate Adverse significance of effect on the Site Character and Its Immediate Context.
- 7.158 The following landscape receptors will be subject to beneficial effects that are of minor or negligible significance including:
- 7.159 The Development will retain and restore Cloddiau & earth bank boundary features. Therefore, it is considered there will be a Small magnitude and Minor Beneficial significance of effect.
- 7.160 With respect to Trees and Woodland, the landscape strategy for the Development includes buffers for the existing woodland and tree belts. Furthermore, proposed planting includes 2.66ha of native woodland planting and existing and proposed woodland will be positively managed for their landscape and habitat value. 0.08ha of orchard planting will also have been planted. As structural planting will not have fully established by Year 1, it is considered that there will be a Small magnitude and Negligible Beneficial significance of effect.
- 7.161 With respect to hedgerows, the Development will re-instate over 1.5km of mixed native hedgerows and manage hedgerows within grassland / ruderal vegetation margins which will in turn reinforce and reinstate the existing landscape structure. In consideration of the overall massing of the Development and as the proposed structural planting will not have established by Year 1, it is considered that the nature of change would result in a Very Small magnitude and a Negligible Beneficial significance of effect.
- 7.162 With respect to the published landscape character areas and landscape AAs, whilst some adverse effects will be experienced, as described in **Appendix 7.5: Landscape Effects Table**, these will not constitute significant effects.

Visual Effects of the Completed Development

- 7.163 Visual effects that are likely to occur as a result of the completed Development at Year 1 include the introduction of solar panels into open fields and the associated infrastructure, including fencing, access tracks and CCTV; the structures associated with the sub-station; and planting and changes in maintenance regimes.
- 7.164 As described in greater detail in **Appendix 7.6: Visual Effects Table**, the following significant visual effects were identified.

- 7.165 Users of the public footpath 32/51/1 are likely to experience a range of effects throughout their journey, however from within the Site, as illustrated in **Photomontage 1**, there will be a pronounced change in the view experienced whereby the Development will interrupt views of the rolling agricultural fields to the south of the Site. Proposed mitigation includes the planting of a hedgerow between the footpath and the fencing; however, this will provide little in the form of mitigation at Year 1. Therefore, it is considered that there will be a Large magnitude of effect and a Major Adverse significance of effect.
- 7.166 Users of the diverted public footpath 32/51/2 will experience close-range open views of the Development within Field Parcel 9 and 11, as illustrated in **Photomontage 6**. The footpath will have been diverted to run adjacent to the western field boundary as opposed to directly through Field Parcel 11. From the diverted footpath, there will be a pronounced change in the view experienced whereby the Development will interrupt views of the rolling agricultural fields where they are available from this route. Proposed mitigation includes the planting of a hedgerow between the footpath and the fencing. However, proposed hedgerows will not have fully established by Year 1 so, there will be mostly open views. Therefore, it is considered that there will be a Large magnitude of effect and a Major Adverse significance of effect.
- 7.167 Users of public footpath 32/52 will experience mostly open views of the Development to the south. To the north, views of the solar infrastructure will be generally screened by the retained and enhanced hedgerow adjacent to the footpath. At gaps in the hedgerow, however, there will be a noticeable change in the view. The landscape strategy includes a minimum 100m buffer from the property Upper Longstone, and in turn situates the solar infrastructure within lower areas of the Site to the north. It also includes the restoration and reinstatement of hedgerow field boundaries which once established will strengthen the local landscape character and legibility of the rolling landform. Therefore, receptors are likely to experience an overall Medium magnitude of effect and a Moderate Adverse significance of effect.
- 7.168 It is considered that residents of Lower Lamphey Road will experience filtered views of the Development over and between gaps in the roadside planting. The Development is set back from the road and the Sites northern boundary by approximately 100m, with the majority of the development set behind an existing or proposed hedgerows and woodland planting. Structural planting proposed as part of the landscape strategy will not have fully established to contribute towards screening of the Development by Year 1. Beyond the retained roadside planting, the solar infrastructure will be noticeable in the background of the view extending up towards the ridgelines behind Alleston Farm. Therefore, the experience of residents of Lower Lamphey Road who have some experience of the landscape will be disrupted by the presence of the Development. As a result, it is considered that there will be a Medium magnitude of effect and a Moderate Adverse significance of effect.
- 7.169 Residents of Upper Longstone at the Sites western boundary will experience close-range open views from the rear of the property. An approximately 100m and over buffer is proposed between the property and the proposed solar infrastructure which will be situated within the lower extents of Field Parcels 1-3 and will not obstruct views towards the wider Pembroke valley landscape. As part of the landscape management strategy, trees will be allowed to grow within the hedgerow to the rear of Upper Longstone's garden curtilage. A hedgerow and block of woodland is also proposed to the south of the property within Field Parcel 4, however, these will not have matured by Year 1. Therefore, it is considered that there will be a Medium magnitude of effect and a Moderate Adverse significance of effect.

Mitigation Measures

Construction Phase

- 7.170 Means employed to reduce the adverse effects of construction will be included in a Construction Environmental Management Plan ('CEMP'). Specific measures to reduce the temporary landscape and visual effects of construction comprise:
- No lighting will be used unless necessary. If necessary, controlling the lighting of construction compounds and machinery to minimise upward and outward light pollution through lantern design, direction and baffling and, in addition, ensuring that the minimum area only is lit, for the minimum period;
 - Locating compounds and stockpiles in the least visible locations within the Site, particularly with respect to higher sensitivity receptors; and

- Limiting movement of material between stockpiles so that these do not shift over time, thereby adding to the sense of fragmentation of the landscape structure.

7.171 Whilst the above measures will assist in reducing the perceived adverse effects of the construction of the Development, the primary cause of adverse effects is considered to be the loss of openness as a result of changes to the physical fabric of the landscape. As such the secondary mitigation measures set out above will not alter the overarching significance of the landscape and visual effects.

Completed Development

7.172 Additional mitigation measures to reduce the adverse effects of the Development comprise the continued use of the fields for grazing, and equestrian uses on the eastern side of the Site, to maintain the pastoral use and character of the Site. The proposed strategy for management of the landscape elements is set out in **Appendix 7.9 Outline Landscape and Ecological Management Plan (LEMP)**, and the assessment of residual effects takes into account the implementation of this LEMP.

7.173 In terms of operational effects, the establishment and growth of planting proposals and their ongoing maintenance and the management of existing landscape features are considered as further mitigation measures (secondary mitigation) and form the basis of the assessment of residual landscape and visual effects of the Development during the operational phase at Year 15 during Winter.

Residual Effects

Construction Phase

7.174 Whilst the additional mitigation measures identified will assist in reducing the perceived adverse effects of the construction of the Development, the primary cause of adverse effects is considered to be the loss of openness and changes to the physical fabric of the landscape. As such the additional mitigation measures will not alter the overarching significance of the previously identified landscape and visual effects and the significant effects reported will remain.

Completed Development

7.175 In most cases adverse significant effects will reduce over time as the embedded planting establishes itself and reaches its designed intention through on-going management. As such, the mitigation measures proposed will make a limited contribution to reducing adverse effects at Year 1. In this regard, the assessment of the residual effects of the Development is considered for Year 15 of the Operational Phase.

Completed Development/Operational Phase (Year 15)

7.176 An assessment of the likely significant residual landscape and visual effects resulting from the Development at year 15 of the operational phase has been carried out, taking into account the growth and establishment of proposed planting. The assessment considers the landscape and visual effects of Development during winter where proposed mitigation planting will be out of leaf. During summer of Year 15, the effects are likely to be lessened even further when the proposed planting will be in full leaf and serve to screen and integrate the Development with the wider landscape.

7.177 A full explanation and commentary on the magnitude and significance of effects for the receptors is set out in **Appendix 7.5 Landscape Effects Table** and **Appendix 7.6 Visual Effects Table**. Only significant effects are included in this section.

Residual Landscape Effects

7.178 Over time, the proposed planting as described and illustrated in the Landscape Strategy will become established and mature. The management and maintenance regimes of existing vegetation will reinforce the existing landscape pattern and framework within which the Development is located. However, it is considered that the Development will result in significant adverse effects on one landscape receptors by Year 15.

- 7.179 With respect to the Fields, it is considered that at Year 15, the arable character and open nature of the Fields will remain absent as a result of the Development extending across the rolling landscape pattern. Nonetheless, the proposed landscape enhancements will reinforce the historic field boundaries that enclose and define the fields. Additional mitigation measures include the continued grazing of the fields to maintain the pastoral use of the fields. Ultimately, characteristic features of the Fields (openness and tranquillity) will be lost leading to a Medium magnitude and a Moderate Adverse significance of effect.
- 7.180 The following beneficial significant residual effects are likely to occur:
- 7.181 A Moderate Beneficial residual effect on Trees and Woodland as the proposed trees and woodland will have established to reinforce and strengthen the existing vegetation network.
- 7.182 A Moderate Beneficial residual effect on Hedgerows that will restore traditional field boundaries that contribute to the scenic qualities of the landscape, helping to offset the changes within the fields themselves.

Residual Visual Effects

- 7.183 In Year 15, as a result of the maturation of mitigation planting along the Sites boundaries there will be no significant adverse effects experienced by Residents of either Lower Lamphey Road or Upper Longston. Regarding users of the Sites internal footpaths (32/51/1, 32/51/2 and 32/52), although now mature hedgerows will obstruct existing and unrestricted visibility of the gently rolling agricultural landform, it will also provide a native green corridor that screens views of the existing electricity pylons and Development and is a characteristic feature of the surrounding landscape

Cumulative Effects

- 7.184 As set out within **Table 7.1**, the following developments were identified by consultees as requiring consideration in relation to potential cumulative effects:
- Land east of Mylett's Hill, Golden Hill (Ref: 14/0129/PA) 1.6km north of the Site;
 - Land at West Farm, Cosheston (Ref: 12/0050/PA) 3.5km north of the Site;
 - Land East of Chapel Hill, Orierton (Ref: 14/0148/PA) 4km southwest of the Site; and
 - Land at Wogaston Farm, Pembrokeshire (Ref: 12/0906/PA) 7.5km west of the Site.
- 7.185 Regarding landscape character, Land at Mylett's Hill, Chapel Hill and Wogaston Farm are all located within LCA25 Hundleton and Lamphey, as is the Development. Land at West Farm is located within LCA29 Cosheston Peninsula which is adjacent to LCA25 to the north. The extent of the national and regional character areas is such that it is considered that although the schemes are located within a relatively short distance from each other (1.6-7.5km) within the national and regional character areas. Intervisibility between them is limited and as indicated in the baseline assessment, solar arrays do not form a strong characteristic of the landscape character and will not have a cumulative effect in combination with the Development. In the short term the cumulative effects of solar development on landscape character will be limited. In the longer term there will be beneficial effects arising from associated enhancement of the landscape structure such as the planting of new areas of woodland.
- 7.186 Regarding visual effects, there is only likely to be combined views of the Development alongside Golden Hill and West Farm for northwest bound walkers of PRoW 17/8 as they leave the PCNP. As illustrated in **Site Context Photograph 22**, the existing solar developments form distant and minor features within the view and are limited to small parts of each development. Only a small portion of the Development will be discernible within the elevated areas of Field Parcels 4 in the background of the view. Therefore, neither the existing nor the Development will form prominent features within the views and would not be noticeable in combination with one another. Routes within the study area have been assessed for in succession views and no in succession views were identified.
- 7.187 Due to screening provided by intervening landform and tree cover, there are no views of the Development from around Chapel Hill where there is little to no potential for incremental or sequential views from the

B4319 or other connective roads between settlements. Similarly, there is no intervisibility shared between the Development and the existing solar development at Wogaston Farm with it being over 7.5km away and separated by intervening landform and vegetation.

Decommissioning

7.188 The Development has a modelled operational lifespan of 40 years, at the end of which it will be dismantled and removed, and the Site will be reinstated to previous conditions (with the exception landscape enhancements associated with the vegetative structure that will remain in-situ). The future of the electrical compound including the substation and the energy storage facility would be discussed with the distribution network operator and agreed with the landowner and PCC prior to commencement of decommissioning. If the substation is decommissioned and removed, the landscape and visual effects will be similar or less compared to if it were to remain in use. It is also anticipated that the roads will be removed however this is to be confirmed by the land owner. The landscape and visual effects of decommissioning are likely to be very similar to those during construction. The key differences will be that:

- It is anticipated that decommissioning may be less intense and will happen over a more condensed period of time than construction; and
- Decommissioning will benefit from the screening provided by the enhanced landscape framework of woodland and hedgerows that have established and matured over 40 years.

Decommissioning Landscape Effects

7.189 Overall, decommissioning landscape effects are likely to be the same or less than the construction effects. Significant effects on landscape include:

- a Moderate Adverse significance of effect on Fields; and
- a Moderate Adverse significance of effect on the Site Character and its Immediate Context.

Decommissioning Visual Effects

7.190 Significant visual effects that are likely to occur during decommissioning are generally similar to those during construction, except where proposed planting will screen views and reduce these effects. Significant visual effects include:

- a Moderate Adverse significance of effect on users of PRoW 32/51/1;
- a Moderate Adverse significance of effect on users of PRoW 32/51/2;
- a Moderate Adverse significance of effect on users of PRoW 32/52;
- a Moderate Adverse significance of effect on residents of Lower Lamphey Road; and
- a Moderate Adverse significance of effect on residents of Upper Longstone.

7.191 Mitigation measures for decommissioning will include:

- All disturbed and excavated areas reinstated following completion of the decommissioning activities. Any concrete foundations (if used) will be broken up and removed or left in situ and covered to make up levels;
- Existing vegetation will be protected during decommissioning works to prevent vegetation loss; and
- Existing entrances, tracks and access points will be used for access wherever practicable.

Summary

- 7.192 This ES Chapter has been prepared in accordance with best practice guidelines, including the GLVIA3 and GN46. In summary, a landscape assessment is the systematic description and analysis of the features within the landscape, such as landform; vegetation cover; settlement pattern; building forms; transport patterns; and land uses; which together create a particular sense of place. A visual assessment considers visual receptors, which are the viewers of and within the landscape, and include those at locations such as residential and business properties; public buildings; transport routes; PRoW; public open space; and recognised scenic routes. A detailed LVIA methodology is set out in **Appendix 7.1**.
- 7.193 The significance of effect thresholds for landscape and visual effects is determined by considering the sensitivity of the receptor concerned alongside the magnitude of effect that will be experienced. Effects that have been graded as being 'Major' or 'Moderate' are considered to be significant with respect to the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017^{xi}. Effects that have been graded as 'Minor' to 'Neutral' constitute effects that are not considered to be significant.
- 7.194 The Site is located to the southeast of Pembroke and the west of Lamphey, both of which are designated as conservation areas at their core. The Site encompasses approximately 96ha and comprises 14 agricultural fields with a mix of improved grassland and arable land that are separated by rows of mature hedgerows. An area of mature trees and vegetation is located within the southwestern region of the Site and run into the central region of the Site.
- 7.195 The collection of trees within the Site is known as Alleston Wood, partly which is defined as ancient semi-natural on the Natural Resources Wales Ancient Woodland Inventory. Alleston Farm is also located centrally within the Site and is a Grade II Listed heritage feature. There are 3 PRoW that run through the Site and Sustrans National Cycle Route 4 runs adjacent to the Sites northern boundary. The Pembrokeshire Coast National Park is located approximately 300 meters from the Site to the east and south.
- 7.196 The Site is located within *NLCA 48: Milford Haven* and *LCA 25: Hundleton and Lamphey*. The Site is situated within four Geological AAs: *Pembroke River, Pembroke, Jameston and Hundleton*. The Site is located entirely within the *North of Castlemartin* Habitat AA, and the *Castlemartin* Cultural and Visual Sensory AAs. The Site is also situated within the *Lamphey – Gumfreston* Historical AA.
- 7.197 26 representative viewpoints were identified through desktop analysis and Site visits, and agreed with the Local Authority, and these formed the basis for the assessment of the potential impact of the Development on views and visual amenity from publicly accessible locations.
- 7.198 As a result of the construction activities associated with the Development there will be a direct change in land use of the Site, albeit in general the existing grassland and vegetation will remain. Construction activities will introduce movement and activities associated with vehicles, machinery and stockpiling of materials as construction activity progresses across the Site over the period of approximately 9 months.
- 7.199 Means employed to reduce the adverse effects of construction will be included in a CEMP, including the controlling of lighting, location of compounds and stockpiles away from higher sensitivity receptors, and limiting movement of material between stockpiles.
- 7.200 A Medium magnitude of effect is likely to be experienced with respect to the Site Character and Immediate Context (Medium sensitivity), resulting in a Moderate Adverse significance of effect during construction. This is likely to remain Moderate Adverse after mitigation.
- 7.201 Of the 26 representative viewpoints that have been assessed, significant visual effects are anticipated for the following visual receptors:
- Users of PRoW 32/51/1 are likely to experience a Moderate Adverse significance of effect;
 - Users of PRoW 32/51/2 are likely to experience a Moderate Adverse significance of effect;
 - Users of PRoW 32/52 are likely to experience a Moderate Adverse significance of effect;

- Residents of Lower Lamphey Road are likely to experience a Moderate Adverse significance of effect; and
 - Residents of Upper Longstone are likely to experience a Moderate Adverse significance of effect.
- 7.202 The significant visual effects identified during construction are unlikely to change as a result of mitigation measures.
- 7.203 The completion of the Development will result in a change in land use within eight of the Sites fourteen fields (approximately 40ha of the 96ha). The Development is considered to be temporary and reversible due to the lifespan of the Development (40 years which will be secured by a planning condition) and the ease of decommissioning the Site without any permanent adverse effects on landscape character, other than the subsation, and visual amenity resulting from the Development. With respect to temporal nature of the scheme, it is recognised that although the Development is temporary, it is also long-term.
- 7.204 The majority of the Development is of low, uniform height that is ground mounted and fits within existing field boundaries, albeit over an area of approximately 40 ha. This would result in a change in land use within the existing field pattern, temporarily introducing structures into the open fields, but with limited removal of existing landscape features such as hedgerows, trees and woodland, to accommodate access, is proposed. The most prominent element of the Development includes a substation. The Development will include inverter and transformer stations, and include CCTV, fencing and gates and weather stations.
- 7.205 A Landscape Strategy has been prepared that incorporates landscape and ecological mitigation and enhancement measures into the Development and has been informed by the strategy and guidelines of the landscape as set out by the LANDMAP assessment and local planning policy (Welsh Government's Approach to Net Benefits for Biodiversity and the DECCA Framework, 2022) along with ecology and tree surveys and recommendations.
- 7.206 Therefore, a Medium magnitude of effect is likely to be experienced with respect to the Fields and the Site Character, which are of Medium sensitivity, resulting in a Moderate Adverse significance of effect at Year 1 of completion.
- 7.207 With respect to watercourses and water features, which are of Medium sensitivity, a Small magnitude of effect is likely to occur, resulting in a Minor Beneficial significance of effect. This is due to the creation of wide landscape buffers to these features, reducing pressure of grazing as well as the proposed planting and creation of new habitat ponds with wet meadow grassland. A Small magnitude of effect on trees and woodland, which are of High sensitivity, is likely to occur, resulting in a Negligible Beneficial significance of effect at Year 1.
- 7.208 Whilst the Development will result initially in Negligible Adverse effects upon Hedgerows, Trees and Woodland within the Site (Medium sensitivity, Very small magnitude of effect) the implementation of the landscape strategy, including planting of 25,000 sqm of new woodland and 1,700 m of hedgerow, will lead to Moderate Beneficial residual effects at year 15.
- 7.209 Significant visual effects at Year 1 are anticipated in relation to the following visual receptors:
- Users of PRoW 32/51/1 are likely to experience a Major Adverse significance of effect; and
 - Users of PRoW 32/51/2 are likely to experience a Major Adverse significance of effect;
 - Users of PRoW 32/52 are likely to experience a Moderate Adverse significance of effect;
 - Residents of Lower Lamphey Road are likely to experience a Moderate Adverse significance of effect; and
 - Residents of Upper Longstone are likely to experience a Moderate Adverse significance of effect.
- 7.210 Over time, the proposed planting as described in the Landscape Strategy will become established and, together with the management and maintenance regimes of existing vegetation, will reinforce the existing

landscape pattern and framework within which the Development is located and substantially increase the screening provided.

- 7.211 As a result, the following significant residual landscape and visual effects are likely to occur:
- A Moderate Adverse residual effect on Fields;
 - A Moderate Beneficial residual effect on Trees and Woodland; and
 - A Moderate Beneficial residual effect on Hedgerows;
- 7.212 With respect to decommissioning, the landscape and visual effects of decommissioning are likely to be very similar to those during construction. The key differences will be that:
- Decommissioning may be more intense, happening over a more condensed period of time than construction; and
 - Decommissioning will benefit from the screening provided by the enhanced landscape framework of woodland and hedgerows that have established and matured over 40 years.
- 7.213 **Appendix 7.5: Landscape Effects Table** and **Appendix 7.6: Visual Effects Table** describe the judgements that have been made and the likely effects that have been assessed. **Table 7.13** contains a summary of the likely significant effects of the Development.

Table 7.13: Table of Significance – Landscape and Visual Effects

Potential Effect	Nature of Effect (Permanent/ Temporary)	Significance (Major/Moderate/Minor) (Beneficial/Adverse/ Negligible)	Mitigation / Enhancement Measures	Geographical Importance*						Residual Effects (Major/Moderate/Minor) (Beneficial/Adverse/ Negligible)
				I	UK	E	R	C	L	
Construction										
The Site and its immediate context	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Fields	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Users of PRoW 32/51/1	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Users of PRoW 32/51/2	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Users of PRoW 32/52	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Residents of Lower Lamphey Road	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Residents of Upper Longstone	Temporary	Moderate Adverse	Implementation of CEMP						X	Moderate Adverse
Completed Development										
The Site and its immediate context	Temporary	Moderate Adverse	Planting and management / maintenance of vegetation and features as appropriate.						X	Minor Adverse
Fields	Temporary	Moderate Adverse							X	Moderate Adverse
Trees and Woodland	Permanent	Minor Beneficial							X	Moderate Beneficial
Hedgerows	Permanent	Negligible Beneficial							X	Moderate Beneficial
Users of PRoW 32/51/1	Temporary	Major Adverse							X	Minor Adverse
Users of PRoW 32/51/2	Temporary	Moderate Adverse							X	Minor Adverse
Users of PRoW 32/52	Temporary	Major Adverse							X	Minor Adverse
Cumulative Effects										
<i>No likely significant cumulative landscape and visual effects identified.</i>										

* Geographical Level of Importance

I = International; UK = United Kingdom; S = Scotland; R = Regional; C = Council; L = Local

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- ⁱⁱⁱ Design Commission for Wales (2023) *Designing for Renewable Energy in Wales [online]* available at: [designing-for-renewable-energy-in-wales.pdf \(gov.wales\)](#)
- ^{iv} Pembrokeshire County Council (2013) *Pembrokeshire County Council Local Development Plan [online]* available at: [Adopted Local Development Plan - Pembrokeshire County Council](#)
- ^v Landscape Institute and Institute of Environmental Management & Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment, Third Edition*
- ^{vi} Council of Europe (2000) *European Landscape Convention 'Florence Convention', Council of Europe Treaty Series No. 176*
- ^{vii} Welsh Government (2017) *The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (No. 567 (W.136) as amended by S.I. 2019/245)*
- ^{viii} Natural Resources Wales (2014) *NLCA48 Milford Haven [online]* available at: [nlca48-milford-haven-description.pdf \(cyfoethnaturiol.cymru\)](#)
- ^{ix} Natural Resources Wales (2014) *NLCA47 South Pembrokeshire Coast [online]* available at: [nlca47-south-pembrokeshire-coast-description.pdf \(cyfoethnaturiol.cymru\)](#)
- ^x Natural Resources Wales (2024) *Using LANDMAP in Landscape and Visual Assessments [online]* available at: [Natural Resources Wales / Using LANDMAP in Landscape and Visual Impact Assessments GN46](#)