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Environmental Statement

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Volume IV, Appendix 6A: Landscape and Visual Impact Assessment (LVIA) Legislative Frameworks, Policy Context and Methodology and Glossary

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6 Appendix 6A – LVIA Methodology

6.1 Legislative Framework and Policy Context

6.1.1 This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to Landscape and Visual Amenity.

6.2 Legislative Framework

6.2.1 A summary of the relevant legislation applicable to Landscape and Visual Amenity is provided in **Table 6A-1.**

Table 6A-1 - Legislation relevant to the Landscape and Visual Amenity Assessment

Legislation	Legislative Context
Wellbeing of Future Generations (Wales) Act 2015[1]	The Act puts in place seven well-being goals to help ensure that public bodies are all working towards the same vision of a sustainable Wales. In relation to landscape matters, the most relevant well-being goal is the achievement of 'a resilient Wales', which seeks to maintain and enhance a biodiverse natural environment that has the capacity to adapt to change (for example climate change). Planning Policy Wales Edition 12 (Ref 11-2) recognises that this goal can be supported by identifying, understanding, valuing, protecting, maintaining and enhancing sufficient scales, extent and connectivity of, and between, landscapes and habitats to enable them to withstand the pressures of change and protect, maintain and enhance biodiversity as well as promoting opportunities for social and economic activity and improvements based on valuing and enabling access to the natural, historic and built environment.
Environment (Wales) Act 2016[2]	This Act requires, under Section 6 – Biodiversity and resilience of ecosystems duty, that a public authority must seek to maintain and enhance biodiversity and promote the resilience of ecosystems. This requirement could be interpreted to include landscape as part of the ecosystems approach.

6.3 Policy

6.3.1 A summary of the relevant policy applicable to Landscape and Visual Amenity is provided in **Table 6A-2** below.

[1] National Assembly for Wales. (2015). Well-being of Future Generations (Wales) Act 2015. Available online at: https://www.legislation.gov.uk/anaw/2015/2 [Accessed August 2026].
[2] National Assembly for Wales. (2016). Environment (Wales) Act 2016. Available online at: https://www.legislation.gov.uk/anaw/2016/3/contents/enacted [Accessed August 2026].

Table 6A-2 - Summary of Policy Relevant to Landscape and Visual Amenity Assessment

Policy	Policy Context
National Planning Policy	
Future Wales – The National Plan 2040[3]	**Policy 17** – Renewable and Low Carbon Energy and Associated Infrastructure notes that the Welsh Government strongly supports the principle of developing renewable and low carbon energy from all technologies and at all scales to meet our future energy needs. It goes on to explain that applications for large-scale wind and solar will not be permitted in National Parks and Areas of Outstanding Natural Beauty and all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment. It explains that proposals should describe the net benefits the scheme will bring in terms of social, economic, environmental and cultural improvements to local communities. New strategic grid infrastructure for the transmission and distribution of energy should be designed to minimise visual impact on nearby communities.
Planning Policy Wales (PPW) Edition 12[4]	Large scale solar farms will be considered under the heading of '*Renewable and Low Carbon Energy'* within the *Productive and Enterprising Places'* topic. When discussing '*Locational Policies for Renewable and Low Carbon Energy Development',* paragraph 5.9.15 states that '*outside identified areas, planning applications for renewable and low carbon energy developments should be determined based on the merits of the individual proposal* and goes on to explain that the *local need for a particular scheme is not a material consideration, as energy generation is of national significance'.* Paragraph 5.9.20 explains that when determining applications planning authorities should identify '*the impact on the natural and historic environment as well as their cumulative impact.'* Paragraph 5.9.21 expects developers wherever possible to '*consider how to avoid, or otherwise minimise, adverse impacts through careful consideration of location, scale, design and other measures.'* General LVIA issues are included in Chapter 6 - Distinctive and Natural Places and more specifically within Section 6.3 Landscape. Paragraphs 6.3.12 and 6.3.13 relate to non-statutory designations such as Special Landscape Areas *that 'define local areas of high landscape importance, which may be unique, exceptional or distinctive to the area. Planning authorities should apply these designations where there is good reason to believe that normal planning policies cannot provide the necessary protection.'* Paragraphs 6.3.20 and 6.3.21 concerns the use of LANDMAP and its role in informing landscape assessments needed to inform local authorities in making local policy, guidance and decision making.
Local Planning Policy	
Adopted Vale of Glamorgan Local	**SP10 - Built and Natural Environment** Policy SP10 requires development proposals to preserve, and where appropriate enhance, the rich and diverse built and natural environment and heritage of the Vale of Glamorgan. This includes architectural and historic qualities, historic landscapes, parks and gardens, Special Landscape Areas, the Glamorgan Heritage

[3] Welsh Government (2021). Future Wales: the national plan 2040. Available online at: https://www.gov.wales/future-wales-national-plan-2040 [Accessed August 2026].
[4] Welsh Government (2024). Planning Policy Wales. Edition 12. Available online at: https://www.gov.wales/planning-policy-wales [Accessed August 2026].

Policy	Policy Context
Development Plan 2011-2026[5]	Coast, sites designated for nature conservation importance, and important archaeological and geological features. The supporting text recognises the importance of sensitive design and appropriate siting in minimising effects on natural systems, landscapes, species and habitats, and in providing opportunities for habitat creation or enhancement where appropriate. **MD1 - Location of New Development** Policy MD1 sets out the framework for new development on unallocated sites. It requires development to have no unacceptable impact on the countryside, to promote sustainable transport where appropriate, to make beneficial use of previously developed land and buildings where possible, to avoid flood risk, to safeguard water resources and to have no unacceptable impact on the best and most versatile agricultural land. Within rural locations, development is expected to be carefully managed to protect the distinctive character of the Vale of Glamorgan, and proposals affecting Special Landscape Areas are to be considered against Policy MG17. **MD2 - Design of New Development** Policy MD2 requires development proposals to create high quality, healthy, sustainable and locally distinct places. Of particular relevance to landscape and visual matters, development should positively contribute to the context and character of the surrounding natural and built environment, protect existing features of townscape or landscape interest, respond appropriately to the local context, safeguard amenity, incorporate sensitive landscaping, retain and enhance landscape features and biodiversity interests where appropriate, and mitigate the causes and effects of climate change. The supporting text to Policy MD2 confirms that all development proposals should fully consider the context and character of their setting, including important views and vistas, and that the design, layout and landscape treatment of development should contribute positively to the local environment. The policy is therefore relevant to the assessment of the siting, layout, panel arrangement, boundary treatment, access tracks, fencing, substations and landscape mitigation associated with solar farm development. **MD7 - Environmental Protection** Policy MD7 seeks to ensure that development proposals do not result in unacceptable environmental impacts, including those associated with pollution, amenity and environmental quality. The Renewable Energy SPG further explains that Policy MD7 is relevant to renewable and low carbon technologies where pollution or amenity impacts could arise, and encourages developers to consider potential environmental effects at the earliest stages of the development process. **MD9 - Promoting Biodiversity** Policy MD9 is relevant where development has the potential to affect biodiversity interests. In the context of solar farm development, the policy supports the need to protect and enhance biodiversity through the retention and enhancement of existing ecological features, habitat connectivity and

[5] Vale of Glamorgan Council (2012). Vale of Glamorgan Local Development Plan 2011-2026. Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LDP/LDP-Adoption/Adopted-LDP-Written-Statement-June-2017-final-interactive-web-version.pdf [Accessed August 2026]

Policy	Policy Context
	appropriate mitigation or enhancement measures. This is also supported by the Council's Biodiversity and Development SPG, which is identified as adopted supplementary guidance and a material consideration in the determination of planning applications. **MD19 - Low Carbon and Renewable Energy Generation** Policy MD19 provides the principal development management policy for low carbon and renewable energy generation. The policy allows renewable energy development where it can be demonstrated that there would be no unacceptable impact on interests including best and most versatile agricultural land, aviation safeguarding, communications systems, landscape importance, natural and cultural heritage, nature conservation, residential amenity and soil conservation. The LDP also confirms that cumulative impacts of renewable energy schemes are an important consideration. For a solar farm proposal, Policy MD19 is directly relevant to the LVIA as it requires consideration of potential impacts on landscape importance, natural and cultural heritage, residential amenity and cumulative effects. The assessment should therefore demonstrate how landscape character, visual receptors, designated landscapes, heritage settings, settlement edges, public rights of way, transport corridors and cumulative solar development have informed the siting, design and mitigation strategy for the Proposed Development.
Vale of Glamorgan Supplementary Planning Guidance (SPG) **Renewable Energy SPG (March 2019)[6]** **Design in Landscape SPG[7]** **Biodiversity and Development SPG[8]** **Trees, Woodlands, Hedgerows and**	**Renewable Energy SPG, March 2019** The Renewable Energy Supplementary Planning Guidance (SPG) supports the implementation of the Vale of Glamorgan Local Development Plan 2011–2026 and is a material consideration in the determination of planning applications and appeals (paragraphs 2.1–2.2). Its purpose is to provide detailed guidance on the consideration of renewable energy development and support the relevant policies of the adopted LDP. Paragraphs 1.4–1.5 state that renewable energy proposals should be informed by landscape capacity, good design and site suitability, whilst maintaining wider planning objectives including the conservation and enhancement of natural heritage. The guidance applies primarily to renewable energy developments up to 10MW. Paragraph 3.3 confirms that the benefits of renewable energy generation should be balanced against potential economic, social, amenity and environmental effects, including impacts on biodiversity and the visual landscape, whilst paragraph 3.5 identifies solar, wind and biomass as the principal renewable energy technologies within the Vale of Glamorgan. For solar developments, Appendix 7 and paragraph 6.1.2 recognise the need for detailed site-specific assessment of landscape character, visual amenity and

[6] Renewable energy, Supplementary planning guidance (March2019). Vale of Glamorgan Local Development Plan 2011-2026. Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/SPG/Renewable-Energy-SPG-March-2019.pdf [Accessed August 2026]
[7] DESIGN IN THE LANDSCAPE, Supplementary planning guidance. The Vale of Glamorgan Unitary Development Plan 1996 – 2011. Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/Design_Landscape_SPG.pdf [Accessed August 2026]

[8] Biodiversity and Development, Supplementary planning guidance (April2018). Vale of Glamorgan Local Development Plan 2011- 2026.Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/Biodiversity-and-Development-SPG-2018.pdf [Accessed August 2026]

Policy	Policy Context
Development SPG[9]	environmental constraints, beyond the strategic identification of potential solar resource areas.
Sustainable Development SPG[10]	Section 7.3 (*Landscape and Visual Impacts*) is particularly relevant to the LVIA. Paragraph 7.3.1 requires landscape and visual considerations to inform the siting, layout and design of renewable energy developments and identifies the need for an LVIA and, where relevant, a cumulative assessment. Paragraphs 7.3.4-7.3.8 recognise that solar farms and associated infrastructure can result in landscape, visual and cumulative effects, including the potential urbanisation of rural landscapes. The guidance advises that existing landscape features should be retained where possible and supplemented by appropriately designed mitigation planting that reflects local landscape character and assists in integrating development into the receiving landscape. Accordingly, the Proposed Development should demonstrate that its siting, layout, scale, ancillary infrastructure and landscape proposals have been informed by the character and sensitivity of the receiving landscape. The assessment should distinguish between effects on landscape fabric and character and effects on visual amenity, while also considering the cumulative interaction with operational, consented and proposed renewable energy developments. **Design in the Landscape SPG** Integration of development into the landscape of the Vale of Glamorgan. Paragraphs 1.1-1.3 explain that its purpose is to ensure that landscape-related design issues are appropriately addressed and that development reinforces local distinctiveness and the Vale's sense of place, or *bro*. Although originally prepared to supplement the former Unitary Development Plan, its landscape design principles remain relevant where they are consistent with the adopted LDP and current national planning policy. Paragraphs 3.1–3.3 emphasise that development should be integrated into the landscape through an understanding of the site's context, character and defining features. The guidance is not intended to prescribe a particular architectural or landscape style, but to establish a sound framework from which locally responsive design and long-term management can emerge. For the Proposed Development, the most relevant considerations include: • The relationship between the development and the scale, pattern and enclosure of the surrounding landscape; • The siting of infrastructure in relation to landform, skylines, settlement edges and established views;

[9] Trees, Woodlands, Hedgerows and Development, Supplementary planning guidance (Jan2025). Vale of Glamorgan Local Development Plan 2011- 2026. Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/SPG/Final-Trees-Woodlands-Hedgerows-and-Development-SPG-2025.pdf [Accessed August 2026]

[10] Sustainable Development, Supplementary planning guidance. Vale of Glamorgan Local Development Plan 1996 – 2011.Available online at: https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/Sustainable_Dev_SPG.pdf [Accessed August 2026]

Policy	Policy Context
	• The retention of characteristic field boundaries, hedgerows, mature trees and woodland; • The use of materials, colours and finishes that reduce visual contrast and respond to the rural setting; and • The establishment of planting that reflects locally characteristic species, patterns and management practices. Design Guideline DG16, *Woodlands and Hedgerows*, seeks to conserve and reinforce the established matrix of woodland and hedgerows within the Vale. It advises that new hedgerows and hedgerow restoration should reflect the species composition, width, density, standard tree content and alignment of adjoining field boundaries. It also encourages new hedgerow and woodland planting that connects existing landscape features and strengthens ecological and landscape networks. In the context of the Proposed Development, the SPG supports a landscape-led design approach in which mitigation is embedded within the site layout from the outset. Existing vegetation should therefore be treated as part of the site's structural landscape framework, rather than as a separate screening device added following the determination of the technical layout. **Biodiversity and Development SPG** The *Biodiversity and Development SPG* supplements LDP Policies MG19, MG20, MG21 and MD9 and provides guidance on the conservation and enhancement of biodiversity throughout the planning and development process. Paragraphs 1.1–1.3 establish that biodiversity considerations should be incorporated at the earliest stages of development in order to minimise adverse effects, avoid delays and secure long-term environmental benefits. Paragraphs 1.4 and 1.11 are particularly relevant to the landscape strategy because they recognise hedgerows and other linear habitat features as ecological corridors and stepping stones across the landscape. Such features assist species movement, foraging and migration and support ecological resilience in response to habitat fragmentation and climate change. Biodiversity must therefore be integrated into the design and delivery of development proposals from an early stage. Section 10 establishes a sequential approach to minimising development impacts. Paragraph 10.1.1 requires the findings of ecological surveys to inform the design process by identifying both constraints and opportunities. Paragraph 10.2.1 further encourages development to be future-proofed by considering not only the habitats and species currently present, but also the ecological functions and habitats that the completed development could support in the future. Under paragraph 10.3.1, the primary objective should be to avoid adverse effects on habitats and species before relying on mitigation or compensation. In the context of the LVIA and landscape strategy, the SPG is relevant to: • The retention, protection and enhancement of hedgerows, trees, field margins and other habitat features; • The maintenance and strengthening of habitat connectivity across and beyond the Site; • The integration of landscape mitigation with biodiversity enhancement;

Policy	Policy Context
	• The avoidance of unnecessary fragmentation or severance of ecological networks; • The use of locally appropriate, resilient species within new planting; and • The implementation of long-term management measures capable of delivering enduring landscape and biodiversity benefits. The landscape and ecological strategies should therefore be developed collaboratively so that proposed mitigation performs multiple functions, including landscape integration, habitat creation, ecological connectivity and climate resilience. **Trees, Woodlands, Hedgerows and Development SPG, January 2025** The *Trees, Woodlands, Hedgerows and Development SPG*, updated in January 2025, is a relevant material consideration where development may affect existing trees, woodland, hedgerows or associated root protection areas. Paragraphs 1.1–1.3 recognise these features as integral components of the Vale's urban and rural landscapes, contributing to visual amenity, local distinctiveness, biodiversity, climate resilience, air quality and the integration of development into its setting. Sections 6–10 provide guidance on the survey, protection and integration of trees and hedgerows within development proposals. Paragraph 8.1.1 states that landscape provision and green-space design form an integral part of the planning process and that early consideration of landscape matters generally results in development with a stronger sense of place, character and quality. It recommends the preparation of an opportunities and constraints assessment to demonstrate how existing vegetation and other landscape features have informed the design process. Paragraph 8.1.2 expects development layouts to incorporate existing trees, tree groups and hedgerows sensitively so that they contribute to visual amenity and nature conservation. It also encourages connections between existing vegetation within and adjoining the site and new green infrastructure introduced as part of the development. For the Proposed Development, the guidance is relevant to: • The early identification of arboricultural and hedgerow constraints; • The retention of mature and visually significant vegetation wherever practicable; • The design of appropriate offsets and buffers around retained features; • The preparation of tree protection plans and arboricultural method statements where required; • The sensitive design of accesses, cable routes and infrastructure to minimise vegetation loss; • Replacement and reinforcement planting appropriate to local landscape character; • The establishment and long-term management of mitigation planting; and

Policy	Policy Context
	• The maintenance of connections between hedgerows, woodland blocks and other green infrastructure. Section 12 also confirms that important countryside hedgerows are protected through the Hedgerows Regulations 1997. Paragraphs 12.1.1-12.1.4 explain that their removal may require formal notification or consent and that the Council will generally seek to prevent removal without adequate justification, taking account of their biodiversity, landscape and historic value. The landscape design should therefore prioritise the retention of established vegetation and use new planting to reinforce the existing field pattern, restore gaps, strengthen ecological connectivity and integrate the solar infrastructure into the wider landscape. Mitigation planting should not be limited to perimeter screening and should be designed as a coherent, multifunctional landscape framework. **Sustainable Development SPG** The Council's *Sustainable Development SPG* provides broader guidance on integrating sustainability into the development process. Its stated purpose is to encourage a holistic approach that reduces environmental effects throughout the lifetime of a development and addresses matters including energy, resource efficiency, drainage, landscape, trees and biodiversity. Section 13 addresses renewable energy sources, including solar photovoltaic technology, while Section 19 considers landscape, trees and ecology. Taken together, these sections support an integrated approach in which renewable energy generation is considered alongside the protection of environmental resources and the creation of an appropriate landscape setting. Although the SPG was prepared in relation to the former *Vale of Glamorgan Unitary Development Plan 1996–2011*, its overarching sustainability principles remain relevant where they accord with the adopted LDP and current national planning policy. The weight attributed to individual requirements should therefore be considered in light of the document's age and its relationship with more recent policy and supplementary guidance. In landscape terms, the Proposed Development should demonstrate an integrated approach that: • Responds to the environmental opportunities and constraints of the Site; • Locates and designs infrastructure to minimise landscape and visual effects; • Retains and reinforces existing green infrastructure; • combines landscape mitigation with biodiversity enhancement; • Uses resources efficiently and incorporates appropriate sustainable drainage measures; • Considers long-term management, decommissioning and landscape restoration; and • Contributes to climate change mitigation without causing unacceptable harm to landscape character, visual amenity or natural heritage. The sustainability benefits associated with renewable energy generation should not, therefore, be treated in isolation from the environmental effects of the

Policy	Policy Context
	Proposed Development. Rather, the scheme should demonstrate how renewable energy objectives, landscape protection, biodiversity enhancement and the sustainable management of natural resources have been addressed through an integrated and iterative design process.
Emerging Vale of Glamorgan Deposit Replacement Local Development Plan 2021-2036[11]	**SP4 – Placemaking** Policy SP4 requires development proposals to ensure high quality sustainable design that reflects local distinctiveness, character and cultural identity while also strategically integrating Green Infrastructure networks and open space into development, delivering social, environmental and ecological benefits. The supporting text explains that new developments should respond positively to local character and contribute meaningfully to their context. Elaborating on the point about Identity the accompanying diagram states that the positive, distinctive qualities of existing places, including heritage, culture, language, built and natural physical attributes, are identified and responded to. **PGD1 – Creating Well Designed and Inclusive Places** Policy PGD1 sets out a series of nine principles that development must demonstrate have been considered to achieve high quality design. The only one with relevance to the Proposed Development is principle four which requires making a positive contribution to the character of the area, responding to the local context and character through building forms and scale; materials and features, mix of uses, landscape, density and connectivity of streets and spaces to create and/or enhance locally distinctive design and character. **CC4 – Renewable, Low and Zero Carbon Energy Generation** Policy CC4 is relevant to proposals for the generation of non-domestic renewable, low and zero carbon energy and their associated infrastructure, including energy storage systems. Proposals must demonstrate that a sequential approach to site selection has been followed to demonstrate that any reasonable, less harmful alternatives have been considered. There must be no unacceptable cumulative impacts with existing or consented development and they must make provision for the appropriate restoration and after care of the land for its beneficial future re-use. There must also be no unacceptable impacts in the interest of landscape importance, natural and cultural heritage or residential amenity. The supporting text elaborates that over time the cumulative effects of these structures may have unacceptable impacts on the visual quality of the wider area. Accordingly, proposers of developments with significant landscape impacts will normally be required to undertake a Landscape and Visual Impact Assessment to demonstrate how they have considered these impacts, including any cumulative landscape impacts with existing or permitted developments. The need for Assessments should be established early in the process, and the requirement for one would be at the Council's discretion. And also that at all scales, careful consideration will need to be given to likely adverse effects that may arise from the proposal. In terms of mitigation, schemes need to be well designed, reflect local circumstances and demonstrate

[11] Vale of Glamorgan Council (2023). Vale of Glamorgan Deposit Replacement Local Development Plan 2021-2036. Available online at: Vale of Glamorgan Council / Cyngor Bro Morgannwg - 1 Vale of Glamorgan Deposit Replacement Local Development Plan [Accessed November 2026]

Policy	Policy Context
	how any environmental, social, resource and economic impacts have been minimised through careful site selection, design, construction, operation and other measures. **SP19 – Green Infrastructure** Policy SP19 requires development proposals to incorporate measures that protect and enhance high quality multi-functional green infrastructure provision. The factors that are most relevant to the Proposed Development to achieve this are to incorporate existing green infrastructure into design, taking advantage of opportunities that are presented by existing and potential assets, through following the principles of placemaking, and to protect and enhance connectivity between existing green infrastructure assets. The supporting text explains that Policy SP19 intends to ensure the enhancement of biodiversity, the resilience of ecosystems, and maximising green infrastructure provision are crucial in responding to both the declared Climate and Nature Emergencies. Policy SP19 seeks to identify where development proposals should protect, enhance, and maintain existing green infrastructure and ensure that green infrastructure provision across the Vale of Glamorgan is holistic and delivers multiple benefits across a wide range of functions. **SP20 – Biodiversity and Ecosystem Resilience** The objective of policy SP20 is that biodiversity in the Vale of Glamorgan will be protected, maintained and enhanced. All development proposals must demonstrate how they will contribute to the maintenance and enhancement of biodiversity and the resilience and connectivity of ecosystems. New development proposals must incorporate existing green infrastructure at the early stages of design, that protects and enhances existing site features and improves the connectivity of the ecological network. And make provision for the on-going maintenance and management of existing and newly created nature conservation interests proportionate to the nature and scale of the development. The supporting text explains that sensitive design and choice of location of new development can have a positive effect on the Vale's built and natural heritage. Similarly, new development will be required to minimise its impact on natural systems, landscapes, species and habitats and where appropriate provide opportunities for the creation of new habitats or the sensitive enhancement of existing habitats. Consideration should be given to the Vale Nature Partnership's Nature Recovery Action Plan (NRAP) and any opportunities that exist to support the actions identified. And that where a management plan is required, this should set out the immediate and on-going management proposals for the site, the future monitoring arrangements and the funding mechanisms available to meet the management plan objectives. The plan should include details of the proposed timescale for securing a net benefit for biodiversity within as short a time scale as possible.

6.4 Overview of LVIA Methodology

6.4.1 The Landscape and Visual Impact Assessment (LVIA) and Cumulative LVIA (CLVIA) identifies, predicts, and evaluates the potential landscape and visual effects that may result from the Proposed Development. This appendix details the methodology for the assessment provided in **Chapter 6: Landscape and Visual of** the ES.

6.4.2 This appendix has been structured as follows:

- Overview of LVIA Methodology;
- Production of Zone of Theoretical Visibility (ZTVs) and Visualisations;
- Integrated Design and Assessment;
- Assessing Landscape Effects;
- Assessing Visual Effects;
- Assessing Cumulative Landscape and Visual Effects;
- Evaluation of Landscape and Visual Effects;
- Determining the Significance of Effect; and
- Glossary.

6.4.3 The LVIA assesses the likely effects of the Proposed Development on the landscape and visual resource, encompassing effects on landscape elements, characteristics and landscape character, designated landscapes, visual effects and cumulative effects.

6.4.4 Essentially, the landscape and visual effects (and whether they are significant) are determined by an assessment of the nature or 'sensitivity' of each receptor or group of receptors and the nature of the effect or 'magnitude of change' that would result from the Proposed Development. The evaluation of sensitivity takes account of the value and susceptibility of the receptor to the type of Proposed Development. This is combined with an assessment of the magnitude of change which takes into account factors such as the size and scale of the proposed change and the geographical extent over which the change is felt. Other factors regarding the nature of the effect such as the duration of change and whether the effect is cumulative are also noted. By combining assessments of sensitivity and magnitude of change, a level of landscape or visual effect as well as the nature of that effect can be evaluated and determined.

6.4.5 The type or nature of effect is described as either direct or indirect; temporary (short, medium or long term), reversible or permanent; cumulative; and positive, neutral or negative. The assessment has also considered the cumulative effects resulting from the Proposed Development in combination with other developments that are currently under construction or proposed at the planning application stage (Pre-application, under Consideration or Consented) within the study area.

6.4.6 The time period for the assessment covers phases of development related to the construction of the Proposed Development and associated infrastructure, its operation,

and decommissioning. For the operational phase the assessment will include a judgement for Year 1 after completion of the construction phase, and again in Year 15. This allows for any changes to take effect in relation to contribution to landscape character or screening provided once the proposed planting has established and matured over time. The effects reported for Year 15 are reported as the Residual Effects in Landscape and Visual terms as these are the effects that would remain in the landscape once mitigation has taken place.

6.4.7 LVIA unavoidably involves a combination of both quantitative and subjective assessment and wherever possible a consensus of professional opinion has been sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach.

Technical guidance and best practice

6.4.8 The methodology for the LVIA accords with the Landscape Institute and IEMA Guidelines for Landscape and Visual Impact Assessment, 3rd Edition[12] (hereafter referred to as GLVIA3). In addition to planning policy documents and other supporting technical guidance, the LVIA methodology includes, but is not limited to the following:

- Using LANDMAP in Landscape and Visual Impact Assessments GN46, 2024[13];
- Landscape Institute Technical Guidance Note 2024-01, Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment, 2024[14];
- Technical Guidance Note 02/21 - Assessing landscape value outside national designations, 2021[15];
- Planning Guidance for the Development of Large-Scale Ground Mounted Solar PV Systems, Building Research Establishment, 2014[16];
- Landscape Institute Technical Guidance Note 06/19, Visual Representation of Development Proposals, TGN 06/19, Landscape Institute, September 2019[17];
- Technical Information Note 04/2020 – Infrastructure, 2020[18]; and

[12] Landscape Institute and the Institute of Environmental Management and Assessment, (2013). Guidelines for Landscape and Visual Impact Assessment. 3rd edition. London. Routledge
[13] Natural Resources Wales. (2021). Using LANDMAP in Landscape and Visual Impact Assessments GN46. (Online). Available at: https://naturalresourceswales.gov.uk/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/using-landmap-in-landscape-and-visual-impact-assessments-gn46/?lang=en (Accessed August 2026).
[14] Landscape Institute (2024). Technical Guidance Note 2024-01 – Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA3). (Online). Available at: EN010159-000700-LCC ISH2 written submission Appendix 1 LITGN-2024-01-GLVIA3-NC_Aug-2024.pdf (Accessed August 2026).
[15] Landscape Institute (2021). Technical Guidance Note 02/21 - Assessing landscape value outside national designations. (Online). Available at: https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/ (Accessed August 2026).
[16] Building Research Establishment (BRE) National Solar Centre, (2013). Planning guidance for the development of large scale ground mounted solar PV systems. (Online). Available at: KN5524_Planning_Guidance_reduced.pdf (Accessed August 2026).
[17] Landscape Institute. (2019). Technical Guidance Note 06/19 Visual Representation of Development Proposals. London. Landscape Institute. (Online). Available at: https://www.landscapeinstitute.org/visualisation/ (Accessed August 2026).
[18] Landscape Institute (2020). Technical Information Note 04/2020 – Infrastructure. (Online). Available at: https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2018/01/LI-Infrastructure-TGN-FINAL-200924.pdf (Accessed August 2026).

- Biodiversity Guidance for Solar Developments, 2024[19].

6.5 Defining the LVIA Study Area

6.5.1 GLVIA3 recommends that 'The level of detail provided should be that which is reasonably required to assess the likely significant effects'. Paragraph 5.2 also states that 'The Study Area should include the site itself and the full extent of the wider landscape around it which the Project may influence in a significant manner'. Current Natural Resources Wales (NRW) guidance[2] advises that the LVIA survey area for structures with a height of less than 25m should extend to a 3km distance with a study area of 2km. The Study Area is therefore based on professional judgement to capture areas that are potentially and likely to be significantly affected by the Proposed Development. This judgement is based on an understanding of the local landscape character and the scale of the construction and development activities proposed within the Site and the extent of their potential visibility established initially through the generation of a Zone of Theoretical Visibility (ZTV) as well as a review of Study Areas used for similar solar projects.

6.5.2 During the early stages of the project, the siting of solar panels was informed by an initial appraisal of the Site and the surrounding landscape which considered a survey area of 5km from boundary of land available to the applicant. The 5km radius provided the starting point for desk-based analysis and early site surveys and appraisals. Field observations contributed to establishing the Site in which the Proposed Development would take place and confirmed that the extent where significant effects could potentially arise lies within 1km of that area.

6.5.3 Accordingly, the formal study area on which the assessment is based has been set at 1km, as shown in **Figure 6.1** of the ES. It is important to note that the defined LVIA Study Area does not represent the limit of potential visibility but the limit to which significant effects are anticipated.

6.6 Desk-based and site survey work

6.6.1 The LVIA is informed by desk-based studies and site / field survey work undertaken within the LVIA study area.

6.6.2 A preliminary desk-based assessment was undertaken of landscape and visual receptors using a range of map-based data and related computer and digital analysis including ZTV, digital and / or surface terrain modelling and wireframe and street view software. This information was used to inform an initial appraisal of the Site and the surrounding landscape.

[19] Building Research Establishment (BRE) National Solar Centre. (2014). Biodiversity Guidance for Solar Developments. (Online). Available at: NSC-Biodiversity-Guidance.pdf (Accessed August 2026).

6.6.3 The field studies have included documented visits to all relevant landscape and visual receptors to assess the likely effects of the Proposed Development in the field, checking data, 'ground truthing' and examining landscape elements, characteristics / character and views / visual amenity. Site and field survey work identified locations for viewpoint photography to accompany **Chapter 6: Landscape and Visual**.

6.6.4 Site and field survey activities include:

- Site survey verification of landscape elements within the Site Boundary where potential effects are likely;
- Field survey verification of the ZTV from landscape and visual receptor locations, transport and recreational routes through the LVIA Study Area;
- Micro-siting of viewpoint locations and recording of panoramic baseline photography and subsequent visual assessment from the assessment viewpoints; and
- Field survey assessment and verification of likely landscape, visual and cumulative effects.

6.6.5 The viewpoint photography and visual assessment surveys were undertaken in February and September 2025, and March 2026. Photography for eleven viewpoints is presented as photosheets with a single and panoramic image provided for each viewpoint showing both leaf cover and no leaf cover in **Figures 6.7-1 to 6.7-5**.

6.6.6 All site survey work was undertaken in fair weather conditions with good visibility.

6.7 Production of ZTVs and Visualisations

6.7.1 Zones of Theoretical Visibility (ZTVs) and viewpoint photography are graphical images produced to assist and illustrate the LVIA and the cumulative assessment. The methodology used for viewpoint photography accords with TGN 06/19, Landscape Institute, September 2019.

Methodology for Production of ZTVs

6.7.2 The ZTVs are calculated using ArcGIS Pro software to generate the zone of theoretical visibility of the Proposed Development. This software creates a 3D computer model of the existing landscape and the Proposed Development using digital terrain data combined with above-ground features as follows:

- A LiDAR-derived Digital Surface Model (DSM) was utilised for visibility modelling. The DSM captures the height of the land surface together with above-ground features present at the time of the LiDAR survey, including woodland, hedgerows and buildings. The use of LiDAR data provides an enhanced representation of potential screening within the landscape and assists in the identification of likely visibility patterns. The computer model includes the entire LVIA Study Area and

takes account of the effects caused by atmospheric refraction and the Earth's curvature. As with all computer-generated visibility modelling, outputs should be regarded as indicative and are supplemented by detailed fieldwork to confirm actual visibility conditions.

6.7.3 The ZTV was generated using key points set at 3.5m high to reflect maximum height of solar panels and 3.5m high for the project substation building. Viewer height was set at 1.6m high.

6.7.4 The resulting ZTV plots are overlaid on Ordnance Survey mapping at an appropriate scale and presented as figures using desktop publishing/graphic design software.

Methodology for Baseline Photography

6.7.5 Once a view has been selected, the location is visited, confirmed, and assessed with the aid of a visualisation in the field. The viewpoint location is micro-sited to avoid as far as reasonable foreground clutter and photographed during fair weather and light conditions. A photographic record is taken to record the view and the details of the viewpoint location and associated data are recorded to assist in the production of visualisations and to validate their accuracy.

6.7.6 The following photographic information is recorded:

- Date, time, weather conditions and visual range;
- GPS recorded 12 figure grid reference accurate to ~5-10m;
- GPS recorded Above Ordnance Datum (AOD) height data;
- The focal length of lens is confirmed;
- Horizontal field of view (in degrees); and
- Bearing to Target Site (Proposed Development).

6.7.7 All photographs included in this assessment were recorded with a digital SLR camera set to produce photographs equivalent to that of a manual 35 mm SLR camera with a fixed 50mm or 75mm focal length lens as required.

Weather Conditions

6.7.8 GLVIA3 discusses the taking of viewpoint photography in the context of producing photomontages, para 8.22 states:

"In preparing photomontages, weather conditions shown in the photographs should (with justification provided for the choice) be either:

- *Representative of those generally prevailing in the area; or*
- *Taken in good visibility, seeking to represent a maximum visibility scenario when the development may be highly visible".*

6.7.9 While photomontages have not been produced on this occasion, photographs have been taken in favourable weather conditions that are representative of the weather conditions generally and where possible, have been taken during periods of 'good' or 'excellent' visibility conditions.

Methodology for Production of Visualisations

6.7.10 Each viewpoint has been illustrated with a photograph of the Site. This includes a photograph of the existing view recorded in fair weather conditions presented as a single image to illustrate the nature of a typical view towards the Site accompanied by a panorama to illustrate wider context. These will be presented as:

- Type 1 Visualisation: an annotated photograph indicating the extent of the Proposed Development and other pertinent elements in the view to aid the reader to understand the Site.

Baseline Photograph Production

6.7.11 Photographs are then taken using a digital SLR camera in combination with a panoramic head equipped tripod. Detailed information is then recorded on site to accurately position the viewpoint location (data such as: GPS grid co-ordinates; ground level information; compass bearings; and any other known references and viewpoint information).

6.7.12 To create the baseline panorama, the photographs from the viewpoint are then digitally joined using PTGui software to form a planar or cylindrical projection image or panorama using computer software to remove 'barrel distortion' caused by the camera lens. There are practical limitations to shooting viewpoint photographs only in very good or excellent visibility and at particular times of day or from locations that avoid foreground clutter or other vertical features such as telegraph poles, particularly where this is a true representation of the view from that viewpoint area.

6.7.13 The completed panoramas/annotated photographs and accompanying data are then presented and annotated as figures using desktop publishing/graphic design software.

Limitations of Visualisations

6.7.14 The visualisations used in the LVIA are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of the extent of the Site that would be visible to users. The assessments are carried out from observations in the field and therefore may include elements that are not visible in the photographs.

6.7.15 The visualisations of the Site have a number of limitations when using them to form a judgement on visual effect. These include:

- The viewpoints illustrated are representative of views in the area but cannot represent visibility at all locations or all weather conditions throughout the year;
- The visualisations must be printed and viewed at the correct size as indicated on the figures;
- Images should be held flat at a comfortable arm's length. If viewing these images on a wall or board at an exhibition, stand at arm's length from the image presented to gain the best impression; and
- It is preferable to view printed images rather than view images on screen. Images on screen should be viewed using a normal PC screen with the image enlarged to the full screen height to give a realistic impression.

6.8 Integrated Design and Assessment

6.8.1 Design is an integrated and iterative part of the LVIA process. The first step is to identify potentially material landscape and visual effects along with the constraints and opportunities connected with their resolution which in this case was carried out during the initial appraisal of the Site and the surroundings. Active engagement with the development of proposals aims to 'design out' potentially significant adverse effects by incorporating measures into the scheme to avoid, eliminate or reduce them. This is known as 'Embedded Mitigation' and can relate to aspects of the scheme such as siting, scale and appearance. Measures relating to landscape design and management are also included to further reduce certain adverse effects, such as new hedge planting to screen views of the development from specific locations. As these are agreed and committed to as part of the Proposed Development, they are included as 'Embedded Mitigation'. 'Additional Mitigation' would be further measures such as new planting to reduce certain adverse effects that are located outside of the Site and require agreement or arrangements with other stakeholders.

6.8.2 The guidance provided within the Vale of Glamorgan Local Development Plan 2011-2026 and with respect to landscape character the *LANDMAP Aspect Areas*, Natural Resources Wales[20] have informed and are relevant to the design of the Proposed Development. These serve as a starting point to understanding the landscape, its ability to accommodate different types of development and any objectives for its management in the future which aid in selecting appropriate design approaches and mitigation responses during the design process.

Potential effects during Construction

6.8.3 A range of potential effects on the landscape and visual resource are likely during the construction of the Proposed Development. An appraisal of the potential effects helps to define the scope of the LVIA and develop an integrated design and mitigation

[20] Natural Resources Wales (2021). Wales Environmental Information Portal – open data. (Online). Available at View open data on access, flood, habitats, landscapes, marine, designated land, water quality, and woodlands | Wales Environmental Information Portal. (Accessed August 2026)

response which can be embedded into the Proposed Development. The potential effects likely to result from construction are described below.

- Landscape Effects:
    - Effects on landscape elements, features and patterns (including, but not limited to soils, landform, ground vegetation, hedgerows / field boundaries, trees / forestry and buildings) and other characteristic elements of the host LANDMAP Aspect Areas as a result of land preparation including site clearance and earthworks.
    - Effects on landscape character and key characteristics, particularly of the host and surrounding LANDMAP Aspect Areas, including perceptual characteristics and qualities as a result of construction activities. The construction activities are likely to include the presence of construction staff and machinery, cranes, vehicle movements, contractors' facilities and site access associated with the Proposed Development.
    - Effects on the special landscape qualities and integrity of designated landscapes through the potential degradation or erosion of landscape elements and patterns and perceptual characteristics, particularly those that form key characteristic elements of host and surrounding LANDMAP Aspect Areas or contribute to their value as a result of the above construction activities.
- Visual Effects:
    - Effects on the views and visual amenity experienced by people undertaking various activities at various locations, distances and directions from the proposed land preparation and construction activities. These visual effects could be experienced from one location or sequentially as part of a route through the landscape such as a cycle route or long-distance footpath.
- Cumulative effects:
    - Cumulative effects could occur as a result of activities from construction of multiple developments affecting a landscape or visual receptor.

6.8.4 Mitigation and design responses may include a range of design decisions about the location, form, process and timing of construction related infrastructure / operations to mitigate potential landscape and visual effects (avoid, reduce or compensate) as well as reference to a range of best practice behaviours and processes undertaken as part of construction site operation.

Potential Effects during Operation

6.8.5 The potential effects during operation relate principally to the presence of the Proposed Development (PV arrays and associated equipment housed in containers and perimeter fencing) and its on-going maintenance during the operational period. This is likely to lead to long-term (reversible) effects on landscape and visual receptors.

6.8.6 Embedded mitigation at this stage includes the retention of hedgerows and trees where they do not interfere with operational or ecological objectives. These will be reinforced, managed and supplemented to ensure screening and containment of the PV arrays. **Chapter 6: Landscape and Visual** is accompanied by a Landscape and Ecological Masterplan and Outline Landscape and Ecological Management Plan (OLEMP) (see **Appendix 6G**) setting out the strategic mitigation measures that have been incorporated into the Proposed Development.

Potential Effects during Decommissioning

6.8.7 The Proposed Development would be decommissioned, during this short-term period similar to that of construction where the equipment is removed and then a longer term stage following land reinstatement, leading to a whole or partial reversal of the landscape and visual effects.

6.9 Assessing Landscape Effects

6.9.1 Landscape Effects are defined by the Landscape Institute in GLVIA3, paragraphs 5.1 and 5.2 as follows:

"An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. ... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the development may influence in a significant manner."

6.9.2 In accordance with GLVIA3, the term 'landscape' encompasses areas of 'townscape' and coastal areas of 'seascape'. Areas of landscape are relevant to this assessment, and they are described as follows.

Landscape character

6.9.3 GLVIA3, paragraph 5.4, advises that Landscape Character Assessment should be regarded as the main source for baseline studies. In Wales, Landscape Character Assessments have been produced at a national level and in some cases at a regional level. More detailed environmental information including that for landscape character

has been compiled using LANDMAP which uses Aspect Areas in place of Landscape Character Areas/Types. Due to the coastal/estuary location of the Site, baseline information will also be sourced from the National Seascape Assessment for Wales[21] which breaks the coastal waters around Wales into Marine Character Areas (MCAs) which will be considered during the assessment. GLVIA3 identifies the following factors which combine to create areas of distinct landscape character:

"the elements that make up the landscape in the study area including:

physical influences – geology, soils, landform, drainage and water bodies;

land cover, including different types of vegetation and patterns and types of tree cover; and

the influence of human activity, including land use and management, the character of settlements and buildings, and pattern and type of fields and enclosure.

The aesthetic and perceptual aspects of the landscape – such as, for example, its scale, complexity, openness, tranquillity or wildness;

The overall character of the landscape in the study area, including any distinctive Landscape Character Types or Areas that can be identified, and the particular combinations of elements and aesthetic and perceptual aspects that make each distinctive, usually by identification as key characteristics of the landscape."

Landscape effects

6.9.4 The potential landscape effects, occurring during the construction, operation and decommissioning periods of the Proposed Development may therefore include, but are not restricted to the following:

- **Changes to landscape elements**: The addition of new elements (solar panel arrays and associated equipment housed in containers and perimeter fencing) or the removal of existing elements such as trees, vegetation and buildings and other characteristic elements or valued features of the host LANDMAP aspect areas;
- **Changes to landscape qualities:** Degradation or erosion of landscape elements and patterns and perceptual characteristics, particularly those that form key characteristic elements of the host and surrounding LCAs, LANDMAP aspect areas and MCAs or contribute to the landscape value of host or adjacent landscape designations;
- **Changes to landscape character:** Landscape character may be affected through the incremental effect on characteristic elements, landscape patterns and qualities (including perceptual characteristics) and the addition of new features, the

[21] LUC. (2015). National Seascape Assessment for Wales. (Online). Available online at: Natural Resources Wales / Marine Character Areas [Accessed August 2026].

magnitude of which is sufficient to alter the overall landscape character within LCAs, LANDMAP aspect areas, MCAs and/or landscape designations;

- **Changes to designated landscapes:** Including nationally and locally designated landscapes that would affect the special landscape qualities underpinning these areas and their integrity; and
- **Cumulative landscape effects:** Where more than one development of a similar type may lead to a cumulative effect or other changes in the area would result in a material change to the baseline character.

6.9.5 Development may have a direct (physical) effect on the landscape as well as an indirect effect which would be perceived from the wider landscape, outside the immediate site area and its associated LANDMAP aspect areas/designations. Landscape effects also have to be recognised in terms of natural and man-made processes which can change or alter the landscape over time.

Evaluating landscape sensitivity to change

6.9.6 The assessment of sensitivity takes account of the landscape value and the susceptibility of the receptor to the type of Proposed Development.

6.9.7 Landscape sensitivity often varies in response to both the type and phase of the development proposed and its location, such that sensitivity needs to be considered on a case-by-case basis. Consideration of landscape value would include any 'inherent sensitivity' such as a National Park that may be described as inherently of high sensitivity on account of its value as recognised through the designation, although it may prove to be less susceptible to a particular type of development, which could be variable across its geographical area. Alternatively, an undesignated landscape may have less recognition of value but could still be highly susceptible to a particular type of development in that it is less able to accommodate it without adverse effects arising. It is the combination of the judgements made regarding landscape value and its susceptibility to the type of development proposed within that particular study area that results in its sensitivity in each case which would account for any relevant 'inherent sensitivity'.

Value of the Landscape Receptor

6.9.8 The value of a landscape receptor is a reflection of the value that society attaches to that landscape. The assessment of the landscape value is classified as high, medium, low, or negligible and the basis for this assessment is made clear using evidence and professional judgement, based on a range of factors as set out in GLVIA3, page 84, Box 5.1. Further information on establishing the value of landscape is provided in the LI's

Technical Guidance Note 02/21[22] which includes Table 1 that contains many of the same factors and principles of Box 5.1 but makes some alterations and updates. **Table 6A-3** below is derived from the guidance and sets out the indicators of value. The importance attached to a landscape, often as a basis for designation or recognition, which expresses national or local consensus, because of its quality including cultural associations, scenic or aesthetic qualities. Landscape value may be indicated by the presence or absence of a landscape planning designation such as a National Landscape (previously AONB) or Special Landscape Area (SLA) (higher value) indicating a landscape of national or local value accordingly or an undesignated landscape (lower value).

6.9.9 The absence of a landscape planning designation should not assume an area of 'low' landscape value and undesignated areas of landscape are often of some local value. Landscapes of lower value tend to include those under intensive agriculture, forestry or urban fringe situations where the landscape elements and patterns have been eroded, landscapes with man-made development such as infrastructure or other renewable energy production features (noting that they may be decommissioned in the lifetime of the Proposed Development), and areas of derelict or vacant land, areas of mineral extraction and / or land fill.

6.9.10 Typical indicators of landscape value are as follows:

- **Landscape designations:** A receptor that lies within the boundary of a recognised landscape related planning designation will be of increased value, depending on the proportion of the receptor that is affected and the level of importance of the designation which may be international, national, regional or local. The absence of designation does not however preclude value, as an undesignated landscape receptor may be valued as a resource at a local level;
- **Landscape quality:** The quality of a landscape receptor is a reflection of its attributes, such as scenic quality, sense of place, rarity and representativeness and the extent to which its valued attributes have remained intact. A landscape with consistent, intact, well-defined and distinctive attributes is considered to be of higher quality and, in turn, higher value, than a landscape where the introduction of elements has detracted from its character; and
- **Landscape experience:** The experiential qualities that can be evoked by a landscape receptor can add to its value. These responses relate to a number of factors including cultural associations that may exist in art, literature or history; the recreational value of the landscape, or the iconic status of the landscape in its own right; and its contribution of other values such as nature conservation or archaeology.

[22] Landscape Institute (2021). Technical Guidance Note 02/21 - Assessing landscape value outside national designations. (Online). Available at: https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/ (Accessed November 2024).

Table 6A-3- Landscape Value Indicators

Value Criteria	Level of Value ranging from High to Negligible		
	High	Medium / Low	Negligible
Value – Landscape Value is determined by a range of indicators/criteria with examples as follows:			
Designation	Designated landscapes/elements with national policy level protection or defined for their natural beauty. Evidence that the landscape/element is valued or used substantially for recreational activity.		Landscapes without formal designation. Despoiled or degraded landscape with little or no evidence of being valued by the community. Elements that are uncharacteristic such as non-natives or self-seeded vegetation that may need to be cleared.
Quality	Higher quality landscapes/elements with consistent, intact and well-defined, distinctive attributes.		Lower quality and indistinct landscapes/elements or features that detract from its inherent attributes.
Rarity	Rare or unique landscape character types, features or elements.		Widespread or 'common' landscape character types, features or elements.
Natural Heritage	Landscape with clear evidence of ecological, geological, geomorphological or physiographic interest which contribute positively to the landscape.		Landscape with no evidence of ecological, geological, geomorphological or physiographic interest
Cultural Heritage	Landscape with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape.		Landscape with no evidence of archaeological, historical or cultural interest.
Landscape Condition	Landscape which is in an excellent physical state both with regard to individual elements and overall landscape structure.		Landscape which is in a poor physical state both with regard to individual elements and overall landscape structure.
Associations	Landscape which is connected with notable people, events and the arts.		Connections with notable people, events or the arts are not present.
Distinctiveness	Landscape that has a strong sense of identity.		Landscape that doesn't have a sense of identity.
Recreational	Landscape offering recreational opportunities where experience of landscape is important.		Landscape offers minimal recreational opportunities.
Perceptual (scenic)	Landscape that appeals to the senses, primarily the visual sense.		Landscape that doesn't appeal to the senses.

Value Criteria	Level of Value ranging from High to Negligible			
	High	Medium	Low	Negligible
Perceptual (Wildness and tranquillity)	Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies.		Landscape with little perceptual value. Lacks wildness, tranquillity and/or dark skies.	
Functional	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape.		Landscape with no clearly identifiable or valuable function, does little to contribute to the healthy functioning of the landscape.	
Typical overall description on the level of value ranging from High to Negligible				
Typical value descriptor	Landscape of notable character with unique or place-defining features and elements. Clearly coherent landscape character, with legible structure or pattern, a strong sense of character and quality. Minimal detracting elements and landscape features typically in good condition. Containing elements of ecological and/or cultural value. High presence of recreational opportunities that contributes positively to the experience and usability of the landscape. No or limited potential for substitution. May include international, national or regional designation/s.		Landscape of little scenic value or importance. Could include ordinary/commonplace or unremarkable areas of landscape. Disjointed landscape structure, character or pattern that is not rare or locally distinctive. Presence of dominant detracting elements and landscape features in poor or declining condition. Considerable potential for substitution. Unlikely to include designation/s.	

Landscape Susceptibility to Change

6.9.11 The susceptibility of a landscape receptor to change is a reflection of its ability to accommodate the changes that will occur as a result of the type of Proposed Development without undue consequences for the maintenance of the baseline situation and / or the achievement of landscape planning policies and strategies. Some landscape receptors are better able to accommodate certain types of development than others due to certain characteristics that are indicative of capacity to accommodate change. These characteristics may or may not also be special landscape qualities that underpin designated landscapes.

6.9.12 Judgements on landscape susceptibility include references to both the physical and aesthetic landscape characteristics, and the potential scope for mitigation. Landscape susceptibility varies according to different areas of landscape character and whilst accepting that solar farm development is likely to lead to high levels of landscape change in most circumstances, factors that commonly indicate lower landscape susceptibility to solar farm development include landscape characteristics of larger

scale, uniformity of land cover, simple landform with limited inter-visibility where the site avoids skylines. The assessment of the susceptibility of the landscape receptor to change is classified as high, medium, low or negligible and the basis for this assessment is made clear using evidence and professional judgement. Generally speaking, lower landscape susceptibility together with lower landscape value tends to indicate lower landscape sensitivity to development. Conversely, higher landscape susceptibility and value tend to indicate higher landscape sensitivity to development.

6.9.13 Common indicators of landscape susceptibility to the type of development proposed (solar farm construction, operation and decommissioning) are as follows:

- **Strength and Robustness:** Collectively the overall characteristics and qualities of a particular landscape result in a strong and robust landscape that is capable of reasonably accommodating solar farm development without undue adverse effects on the special landscape qualities (in the case of a designated landscape) or the key characteristics for which an area of landscape character or a particular element it is valued;
- **Landscape Scale:** The scale is large enough to physically accommodate the development footprint without the requirement of invasive earthworks or drainage. Topographical features such as narrow valleys or more complex and small-scale landforms such as drumlins, incised river valleys / gorges, cliffs or rock outcrops are likely to be more susceptible to this type of development than broad, homogenous topography. In seascape terms this refers to the scale of the sea in relation to coastal form or offshore. A smaller scale seascape that could become dominated by solar farm development would be more susceptible than a larger scale seascape where it could be accommodated;
- **Openness/enclosure:** in the landscape may increase susceptibility to change because it can result in wider visibility of the solar farm development, however open landscape may also be larger in scale and simple, which would decrease susceptibility. Conversely enclosed landscapes can offer more screening potential, limiting visibility to a smaller area, however they may also be smaller scale and more complex which would increase susceptibility. In seascape terms this refers to the degree and nature of enclosure of the sea by land and/or the framing of views. Seascapes where openness is a key characteristic would be more susceptible to solar farm development than where views are restricted or obscured by natural elements or features;
- **Land Cover Pattern:** Ancient and mature or long-established vegetation such as mature trees, woodland and protected hedgerows are likely to be more susceptible to the Proposed Development, particularly where these elements form part of a valued characteristic landscape pattern or feature, although could offer screening and/or enclosure of the solar farm development. Conversely large-scale grassland and monocultures such as forestry and intensive farming practices are likely to be

less susceptible to solar farm development. In seascape terms this refers to the pattern of the coast and hinterland. Open, unspoiled views of the sea with no signs of development, or where important focal points are present, would be more susceptible to solar farm development than a coast or hinterland where elements or features offer screening and there are no important focal points;

- **Skyline:** Prominent and distinctive skylines and horizons with important landmark features that are identified in LANDMAP, are generally considered to be more susceptible to solar farm development in comparison to broad, simple skylines which lack landmark features or contain other infrastructure features. In terms of seascape an unspoiled horizon out to sea would be more susceptible to solar farm development than a horizon towards the sea that already contains or is interrupted by existing features, particularly by man-made elements;
- **Association to context** Contemporary landscapes and seascapes where there are existing solar energy developments or other forms of development (industry, mineral extraction or electrical grid connections) that already have a characterising influence result in a lower susceptibility to development in comparison to areas characterised by smaller scale, historic development and landmarks (historic villages with dense settlement patterns and associated buildings such as church towers). It should be noted that existing solar energy development is time limited and subject to decommissioning;
- **Rationale:** Some site locations have an obvious visual rationale for the Proposed Development in terms of the available space, access, simplicity and relationship to other similar forms of development. Conversely a site may appear overly constrained and require greater engineering or additional construction activity to accommodate a solar farm development with lower design quality and few embedded environmental measures;
- **Perceptual qualities**: Notably landscapes and seascapes that are acknowledged to be particularly scenic, wild or tranquil are generally considered to be more susceptible to development in comparison to ordinary, cultivated or forested / developed landscapes/seascapes where perceptions of 'wildness' are less tangible. Landscapes/seascapes which are either remote or appear natural may vary in their susceptibility to development; and
- **Landscape Context and Adjacent Landscapes:** The extent to which a solar farm development will influence landscape receptors across the study area. This relates to the associations that exist between the landscape receptor within which the solar farm development is located and the landscape receptor from which the solar farm development is being experienced. In some situations, this association will be strong, where the landscapes are directly related. For example, adjacent areas of landscape character may share or 'borrow' a high number of common characteristics. Landscape elements may be linked to or associated with wider landscape patterns such as individual trees forming part of an avenue or patterns

of woodland copses or fields/hedges, for example. In other situations, the association between adjacent landscapes will be weak. The context and visual connection to areas of adjacent landscape character or designations has a bearing on the susceptibility to development. In terms of seascapes this refers to the relationship between the hinterland, coastal edge, intertidal area and sea, and the contribution of the seascape to the character of the area. Where there is a strong visual relationship with the seascape or it is perceived from a sensitive coast/landscape there would be a higher susceptibility than where the visual perception is limited, or it is perceived from a less sensitive coast/landscape.

Table 6A-4- Landscape Susceptibility Indicators

Susceptibility Criteria	Level of Susceptibility ranging from High to Negligible	
	High ⟷ Medium ⟷ Low ⟷ Negligible	
Strength and Robustness	Fragile landscape vulnerable and lacking the ability to accommodate the type of proposed change.	Robust landscape, able to accommodate the type of change proposed or loss of features without undue adverse effects.
Landscape Scale	A smaller scale landscape that may require further engineering to accommodate the type of change proposed.	A landscape of a suitably large enough scale to accommodate the type of change proposed.
Openness/enclosure	An open landscape with limited screening and higher susceptibility to the type of change proposed.	An enclosed landscape with screening and lower susceptibility to the type of change proposed.
Land Cover pattern	Higher value, characteristic land cover and elements that cannot be easily reinstated or replaced.	Lower value, non-characteristic land cover and elements capable of rapid reinstatement or replacement.
Skyline	Distinctive or undeveloped skylines or with landmark features.	Developed, nondistinctive skylines.
Association to context	Type of change has weak and/or indirect association. Other development may be of a smaller scale or historic.	Type of change has strong and/or direct association, other similar contemporary developments/character.
Rationale	A landscape with numerous environmental and technical constraints and fewer environmental measures.	A strong landscape rationale and opportunity with high degree of design quality and/or environmental measures.
Perceptual qualities	Perceptual qualities associated with particular scenic qualities, wildness or tranquillity.	Contemporary, cultivated/settled or developed landscapes are likely to have a lower susceptibility.

Susceptibility Criteria	Level of Susceptibility ranging from High to Negligible	
	High / Medium / Low / Negligible ⟷	
Landscape Context	Adjacent landscape character context by shared character and views.	Host landscape character is separate from surrounding/adjacent landscape character.
Typical overall description on the level of susceptibility ranging from High to Negligible		
Typical susceptibility descriptor	Landscape receptor would be unlikely to accommodate the type of change proposed without unacceptable negative consequences for the maintenance of the baseline landscape character and or the achievement of the landscape planning policies and strategies. Landscape receptor has little or no relationship to the type of development proposed and/or would be difficult to replace or substitute if lost e.g. veteran trees, historic or unique features. Characteristics of the landscape which contribute to the landscape character are highly sensitive and would be fundamentally altered by the type of change proposed.	Landscape receptor would be likely to accommodate the type of change proposed without unacceptable negative consequences for the maintenance of the baseline landscape character and/or the achievement of the landscape planning policies and strategies. Landscape receptor has a close relationship to the type of change proposed and could be easily replaced or substituted if lost. Landscape receptor is of low sensitivity and characteristics of the Landscape would not be significantly altered by the type of change proposed. The general landscape character is resilient to the type of change proposed.

Landscape Sensitivity Rating

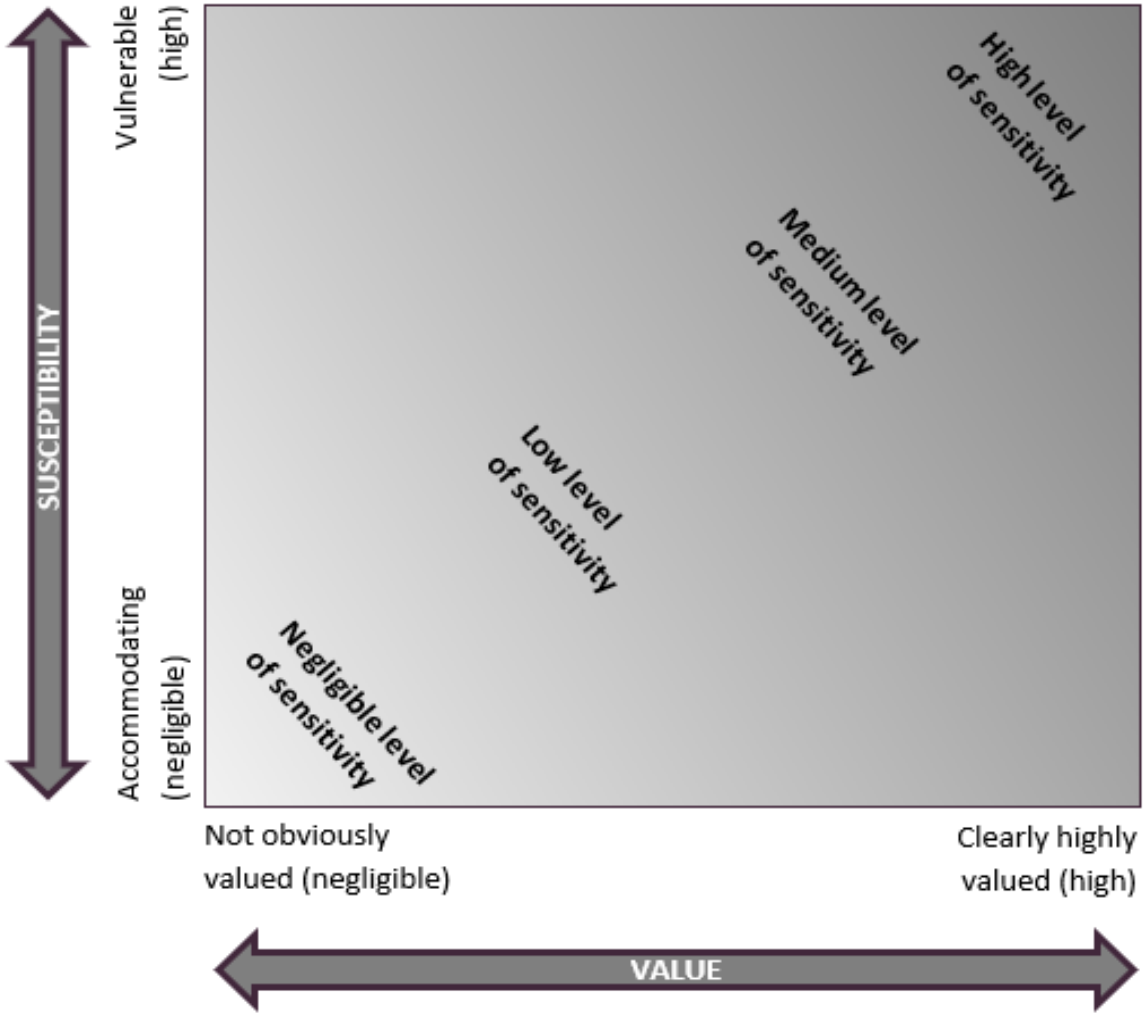
6.9.14 Susceptibility and value can be combined in different ways although it is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity. As noted in GLVIA3, there can be complex relationships between the value attributed to a landscape and its susceptibility to change, which can be particularly important when considering change in designated landscapes or those that are being considered for designated status.

6.9.15 However, whilst a valued landscape may serve to increase the overall sensitivity of the landscape receptor, a low value will not necessarily reduce overall sensitivity. Whilst it would be anticipated that landscape receptors considered highly susceptible to the proposed change will be considered to be of high sensitivity, this will not be the case if there were reasons associated with the value that lead to a reduction in sensitivity. For example, where a designated area or area covered by policy may have a deterioration in recent condition and management regime.

6.9.16 The diagram presented as **Plate 6A-1** illustrates how value and susceptibility can be combined. When determining overall landscape sensitivity, it should be noted that the levels are indicative and fall on a sliding scale from high to negligible and professional judgement is always used to determine the overall level of sensitivity.

6.9.17 Any landscape receptors assigned a negligible level of sensitivity will not be further considered as part of the assessment on the basis that significant effects are highly unlikely as demonstrated by **Plate 6A-1** and to ensure a proportionate assessment.

Plate 6A-1 - Level of Landscape Sensitivity Diagram



Landscape Magnitude of Change

6.9.18 The magnitude of change affecting landscape receptors is an expression of the scale of change that would result from the Proposed Development. Like with sensitivity, combining the scale, geographical extent, and duration/reversibility of the change together requires careful consideration and professional judgement. As such, the LVIA will separately consider each aspect to form the judgement of overall magnitude.

Landscape specific descriptions of these aspects follow while the process for how they are combined is set out for both landscape and visual receptors later.

Size or Scale of Change

6.9.19 This criterion relates to the size or scale of change to the landscape that would arise as a result of the Proposed Development, based on the following factors:

- **Landscape Elements**: The degree to which the pattern of elements that makes up the landscape character would be altered by the Proposed Development, through the loss, alteration or addition of elements in the landscape. The magnitude of change would generally be higher if the features that make up the landscape character are extensively removed or altered, and / or if many new components are added to the landscape;
- **Landscape Characteristics**: The extent to which the effect of the Proposed Development changes (physically or perceptually) the key characteristics of the landscape which may be important to its distinctive character. This may include, for example, the scale of the landform, its relative simplicity, complexity or irregularity, the nature of the landscape context, the grain or orientation of the landscape, the degree to which the receptor is influenced by external features and the juxtaposition of the Proposed Development in relation to these key characteristics;
- **Landscape Character / Designation**: The degree to which landscape character receptors (as represented by LANDMAP Aspect Areas) would be changed by the addition of the Proposed Development. If the Proposed Development is located in a landscape receptor that is already affected by other similar development, this may reduce the magnitude of change if there is a high level of integration and the developments form a unified and cohesive feature in the landscape. In the case of designated landscapes, the degree of change is considered in light of the effects on the special landscape qualities which underpin the designation and the effect on the integrity of the designation;
- All landscapes change over time and much of that change is managed or planned. Often landscapes will have management objectives for 'protection' or 'accommodation' of development. The scale of change may be localised, or occurring over parts of an area, or more widespread affecting whole landscape character areas and their overall integrity. Developmental change may be time limited or permanent; and
- **Distance**: The size and scale of change is also strongly influenced by the proximity of the Proposed Development to the receptor and the extent to which the development can be seen as a characterising influence on the landscape. Consequently, the scale or magnitude of change is likely to be lower in respect of landscape receptors that are distant from the Proposed Development and / or screened by intervening landform, vegetation and built form to the extent that the scale of their influence on landscape receptors is small or limited. Conversely,

landscapes closest to the Proposed Development are likely to be most affected. Host landscapes (where the Proposed Development is located within a 'host' landscape character unit) would be directly affected whilst adjacent areas of landscape character would be indirectly affected.

Geographical Extent

6.9.20 Landscape effects are described in terms of the geographical extent or physical area that would be affected (described as a linear or area measurement). This should not be confused with the scale of the development or its physical footprint. Landscape effects occurring over a larger geographical extent and over a higher proportion of a landscape designation or LANDMAP aspect area are more likely to be regarded as significant. The manner in which the geographical extent of the landscape effect is described for different landscape receptors is explained as follows:

- **Landscape Elements**: The geographical extent of landscape elements may be objectively measured in terms of numbers, area or linear measurement. For example, the number of trees, area of woodland, or length of hedgerow affected may be recorded;
- **Landscape Character / Characteristics**: The extent of the effects on landscape character will vary depending on the specific nature of the Proposed Development. This is not simply an expression of visibility or the extent of the ZTV. It is a specific assessment of the extent of landscape character that would be changed by the Proposed Development in terms of its character, key characteristics and elements; and
- **Landscape Designations**: In the case of a designated landscape, this refers to the extent the special landscape qualities of the designation are affected and whether this can be defined in terms of area or linear measurements, or subjectively (with the support of panel and / or peer review) and whether the integrity of the designation is affected.

Duration and Reversibility

6.9.21 The duration and reversibility of landscape effects is based on the period over which the Proposed Development is likely to exist (during construction and operation) and the extent to which it would be removed (during decommissioning) and the effects reversed at the end of that period. Long-term, medium-term, short-term and brief term landscape effects are defined as follows:

- Permanent Development: No decommissioning, removal or reinstatement is planned; and
- Temporary Development: This includes time limited development, such as a longer period of operation where decommissioning for example forms part of the

Proposed Development or temporary phases of the development such as construction or decommissioning works:

- Long-term – more than ten years;
- Medium-term – one to ten years;
- Short-term – up to one year; and
- Brief term – up to two months.

6.9.22 Reversibility is a separate, but linked consideration concerning the prospects and practicality of a particular effect being reversed. Some forms of development, such as housing can be considered as permanent, whereas other forms of development such as solar farms can be considered as reversible because they have a limited operational life and after their removal the land would be restored. Mineral workings for example may be partially reversible with the landscape restored, although not completed to the same state as the original. In the case of the Proposed Development, the application would have a limited operation period, beyond which the Proposed Development would be decommissioned, or a new application submitted, and many of the effects would be reversed.

6.10 Assessing Visual Effects

6.10.1 Visual Effects are concerned wholly with the effect of the Proposed Development on views, and the general visual amenity and are defined by the Landscape Institute in GLVIA3, paragraphs 6.1 as follows:

"An assessment of visual effects deals with the effects of change and development on views available to people and their visual amenity. The concern ... is with assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views."

6.10.2 Visual effects are identified for different receptors (people) who would experience the view at their place of residence, within their community, during recreational activities, at work, or when travelling through the area. The visual effects may include the following:

- Visual effect: a change to an existing static view, sequential views, or wider visual amenity as a result of development or the loss of particular landscape elements or features already present in the view; and
- Cumulative visual effects: the cumulative or incremental visibility of other developments may combine to have a cumulative visual effect.

6.10.3 The level of visual effect is determined through consideration of the sensitivity of each visual receptor (or range of sensitivities for receptor groups) and the magnitude of change that would be brought about by the construction, operation and decommissioning of the Proposed Development. Visual assessment unavoidably

involves a combination of both quantitative and subjective assessment and wherever possible a consensus of professional opinion is sought through consultation and internal peer review.

Zone of Theoretical Visibility (ZTV)

6.10.4 Plans mapping the ZTV are used to analyse the extent of theoretical visibility of the Proposed Development or any given part of it, across the LVIA Study Area and to assist with viewpoint selection. A ZTV was generated using a Digital Surface Model LiDAR sourced from DEFRA, so takes account of intervening surface features such as buildings and vegetation, using a receptor (viewer) eye height of 1.6m to identify visual receptor groups that are likely to have visibility of the Proposed Development and representative photographic viewpoint locations. Viewpoint photography can also be used to represent and illustrate the character of the area to inform the separate matter and assessment of any indirect or perceptual effects on the surrounding landscape character. The ZTV is shown in **Figure 6.6** of the ES.

6.10.5 The ZTVs provide a starting point in the assessment process and accordingly tend towards giving a 'worst case' or greatest calculation of the theoretical visibility.

Viewpoint Analysis

6.10.6 Viewpoint analysis is used to assist the assessment and is conducted from selected viewpoints within the LVIA Study Area which were identified and included based on the field observations carried out as part of the appraisal process and refined development proposals were progressed. The purpose of this is to assess both the level of visual effect for particular receptors and to help guide the design process and focus the LVIA. A range of viewpoints are examined in detail and analysed to determine whether visual effects would occur. By considering the viewpoints in order of distance, it is possible to define a threshold or outer geographical limit, beyond which it would be reasonable to assume that further significant visual effects would be unlikely.

6.10.7 Viewpoint analysis prepared for each viewpoint is presented as supporting evidence in an appendix to the LVIA (**Appendix 6E**). A summary table of the findings is also provided in order of distance from the Site. This summary table assists in defining the direction, elevation, geographical spread and nature of the potential visual effects and identifies areas where visual effects are likely to occur. This approach seeks to provide clarity and confidence to consultees and decision makers by allowing the detailed judgements on the magnitude of visual change to be more readily scrutinised and understood.

Evaluating Visual Sensitivity to Change

6.10.8 In accordance with paragraphs 6.31-6.37 of GLVIA3, the sensitivity of visual receptors is determined by a combination of the value of the view and the susceptibility of the

visual receptors to the change likely to result from the Proposed Development on the view and visual amenity.

Value of the view

6.10.9 The value of a view or series of views reflects the recognition and importance attached either formally through identification on mapping or being subject to planning designations, or informally through the value which society attaches to the view(s). The value of a view is classified as high, medium or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following criteria:

- **Formal recognition**: The value of views can be formally recognised through their identification on OS or tourist maps as formal viewpoints, sign-posted and with facilities provided to add to the enjoyment of the viewpoint such as parking, seating and interpretation boards. Specific views may be afforded protection in local planning policy and recognised as valued views. Specific views can also be cited as being of importance in relation to landscape or heritage planning designations, for example the value of a view would be increased if it presents an important vista from a designed landscape or lies within or overlooks a designated area, which implies a greater value to the visible landscape; and
- **Informal recognition**: Views that are well-known at a local level and / or have particular scenic qualities can have an increased value, even if there is no formal recognition or designation. Views or viewpoints are sometimes informally recognised through references in art or literature and this can also add to their value. A viewpoint that is visited and appreciated by a large number of people would generally have greater importance than one gained by very few people.

Table 6A-5- Visual Value Indicators

Value Criteria	Level of Value ranging from High to Negligible	
	High Medium Low Negligible	
Map /tourist information	Specific viewpoint identified in OS maps and/or tourist information and signage.	Viewpoint not identified in OS maps or tourist information and signage.
Facilities	Facilities provided at viewpoint to aid the enjoyment of the view.	No facilities provided at viewpoint to aid enjoyment of the view.
Planning recognition	View afforded protection in planning policy.	View is not afforded protection in planning policy.
Landscape value	View is within or overlooks a designated landscape, which implies a higher value to the visible landscape.	View is not within, nor does it overlook, a designated landscape.

Value Criteria	Level of Value ranging from High to Negligible			
	High	Medium	Low	Negligible
Recognition	View has informal recognition and well- known at a local level, as having particular scenic qualities.		View has no informal recognition and is not known as having particular scenic qualities.	
Art/ Literature	View or viewpoint is recognised through references in art or literature.		View or viewpoint is not recognised in references in art or literature.	
Scenic Quality	View has high scenic qualities relating to the content and composition of the visible landscape.		View has low scenic qualities relating to the content and composition of the visible landscape.	
Typical overall description on the level of value ranging from High to Negligible				
Typical value descriptor	Recognised views from nationally or internationally important landscape or heritage resources may be identified in planning policies or statutory documents. High value / celebrated view; referred to in national or international guide books, tourist guides etc.; literary and art references; presence of interpretive facilities (E.g., visitor centre).		Little to no recognition. Not known locally for its views, places that lack evidence of people actively seeking use and therefore any associated views.	

Susceptibility to Change

6.10.10 Susceptibility relates to the nature of the viewer experiencing the view and how susceptible they are to the potential effects of the Proposed Development. A judgement to determine the level of susceptibility therefore relates to the nature of the viewer and their experience from that particular viewpoint or series of viewpoints, classified as high, medium or low and based on the following criteria:

- **Nature of the viewer**: The nature of the viewer is defined by the occupation or activity of the viewer at the viewpoint or series of viewpoints. The most common groups of viewers considered in the visual assessment include residents, motorists, and people taking part in recreational activity or working. Viewers, whose attention is focused on the landscape, or with static long-term views, are likely to have a higher sensitivity. Viewers travelling in cars or on trains would tend to have a lower sensitivity as their view is transient and moving. The least sensitive viewers are usually people at their place of work as they are generally less sensitive to changes in views; and
- **Experience of the viewer**: The experience of the visual receptor relates to the extent to which the viewer's attention or interest may be focused on the view and the visual amenity they experience at a particular location. The susceptibility of the

viewer to change arising from the Proposed Development may be influenced by the viewer's attention or interest in the view, which may be focused in a particular direction, from a static or transitory position and over a long or short duration. For example, if the principal outlook from a settlement is aligned directly towards the Proposed Development, the experience of the visual receptor would be altered more notably than if the experience relates to a glimpsed view seen at an oblique angle from a car travelling at high speed. The visual amenity experienced by the viewer varies depending on the presence and relationship of visible elements, features or patterns experienced in the view and the degree to which the landscape in the view may accommodate the Proposed Development.

Table 6A-6- Visual Susceptibility Indicators

Susceptibility Criteria	Level of Susceptibility ranging from High to Negligible	
	High Medium Low Negligible ← →	
Activity of the viewer	Residents, walkers, cyclists, or tourists, whose main attention and interest is on their surroundings.	Viewers whose attention is not focused on their surroundings (e.g. people at work, users of indoor facilities or team sports).
Nature of the View	Residents that gain static, long-term views in their principal outlook.	Mobile viewers whose views are transient and dynamic (e.g. travelling in cars or on trains with glimpsed views).
Direction/ Field of View	A view that is focused in a specific directional vista, with notable features of interest in a particular part of the view.	Open views with no specific point of interest.
Visual amenity	Viewers are focused on the experience of a high level of visual amenity at the location due to its overall pleasantness as an attractive visual setting or backdrop to activities.	The visual amenity experienced at the location by viewers is considered less pleasant or attractive than might otherwise be the case.

Visual Sensitivity Rating

6.10.11 As with landscape, susceptibility and value can be combined in different ways to form a judgement about the visual sensitivity of a given receptor. It is generally accepted that a combination of high susceptibility and high value is likely to result in the highest sensitivity, whereas a low susceptibility and low value is likely to result in the lowest level of sensitivity.

6.10.12 However, whilst a valued view may serve to increase the overall sensitivity of the visual receptor, a low value will not necessarily reduce sensitivity. Visual receptors considered highly susceptible to the proposed change are normally considered to be of high

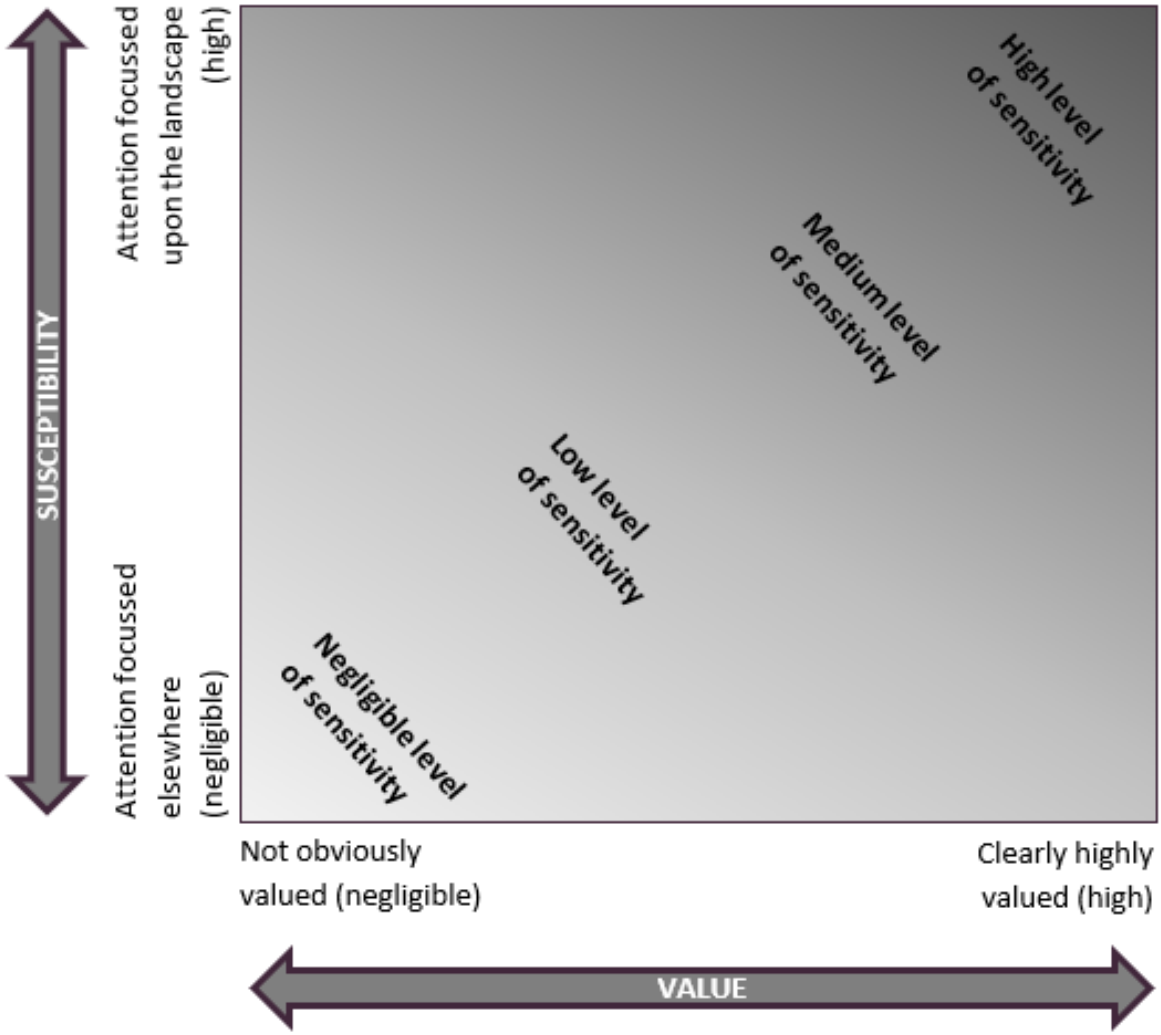
sensitivity unless there are particularly strong reasons associated with the value of the view that led to a reduction in sensitivity. For example, users of National Trails or Long-Distance Walking Routes have a high susceptibility to the proposed change due to their recreational nature that includes appreciating views of the surrounding landscape, but if the view they currently experience is of a considerable low value such as a degraded and/or industrial landscape it is possible that their overall sensitivity to a proposed change of a similar industrial nature will be reduced.

6.10.13 Similarly, receptors considered of low or medium susceptibility are usually in the same category of sensitivity, unless there are reasons associated with the value of the view that lead to an increase in sensitivity, which is shown in Table 6A-5. For example, where a road user on a defined tourist route will have a higher susceptibility to the proposed change than if travelling on a busy main road.

6.10.14 The diagram in **Plate 6A-2** illustrates typical characteristics of the different levels of sensitivity taking into account the value and susceptibility as described above. When determining overall visual sensitivity, it should be noted that the levels are indicative and fall on a sliding scale from high to negligible and professional judgement is always used to determine the overall level of sensitivity.

6.10.15 Any visual receptors assigned a negligible level of sensitivity will not be further considered as part of the assessment on the basis that significant effects are highly unlikely as demonstrated by **Table 6A-10**.

*Plate 6A-2 - **Level of Visual Sensitivity Diagram***



Visual Magnitude of Change

6.10.16 The visual magnitude of change is an expression of the scale of change that would result from the visibility of the Proposed Development. Like with sensitivity, combining the scale, geographical extent, and duration/reversibility of the change together requires careful consideration and professional judgement. As such, the LVIA will separately consider each aspect to form the judgement of overall magnitude. Descriptions of these aspects specific to visual amenity follow while the process for how they are combined is set out for both landscape and visual receptors later.

Size or Scale of Change

6.10.17 An assessment is made of the size or scale of change in the view that is likely to be experienced as a result of the Proposed Development, based on the following criteria:

- **Scale**: The scale of the change in the view, with respect to the loss or addition of features in the view and changes in its composition. The scale of the Proposed

Development may appear larger or smaller relative to the scale of the receiving landscape;

- **Size**: The amount and size of the Proposed Development that would be seen. Visibility may range from small or partial to whole visibility of the Proposed Development. Generally, the larger and greater number of elements (solar panels, access tracks and associated infrastructure) of the Proposed Development that appear in the view, the higher the magnitude of change;
- This is also related to the degree to which development may be wholly or partly screened by landform, vegetation (seasonal) and / or built form. Conversely open views are likely to reveal more of a development, particularly where this is a key characteristic of the landscape;
- **Screening**: The Proposed Development may be wholly or partly screened by landform, vegetation (seasonal) and or built form. Conversely open views, particularly from landscapes where LANDMAP identifies their availability as a characteristic, are likely to reveal more of a development;
- **Distance**: The distance between the visual receptor / viewpoint and the Proposed Development. Generally, the greater the distance, the lower the magnitude of change, as the Proposed Development would constitute a smaller-scale component of the view due to the effects of perspective;
- **Field of View** The vertical / horizontal field of view (FoV) and the proportion of view that is affected by the Proposed Development. Generally, the more of the proportion of a view that is affected, the higher the magnitude of change would be. If the Proposed Development extends across the whole of the view, the magnitude of change would generally be higher as the full view would be affected. Conversely, if the Proposed Development extends over a narrow part of an open view, the magnitude of change is likely to be reduced as the Proposed Development would not affect the whole view or outlook. This can in part be described objectively by reference to the horizontal / vertical FoV affected, relative to the extent and proportion of the available view;
- **Contrast**: The character and context within which the Proposed Development would be seen and the degree of contrast or integration of any new features with existing landscape elements, in terms of scale, form, mass, line, height, colour, luminance and motion. Developments which contrast or appear incongruous in terms of colour, scale and form are likely to be more visible and have a higher magnitude of change;
- **Consistency of image**: The consistency of image of the Proposed Development in relation to other developments. The magnitude of change for the Proposed Development is likely to be lower if it appears broadly similar to other developments in the landscape in terms of its scale, form and general appearance.

New development is more likely to appear as logical components of the landscape with a strong rationale for their location;

- **Skyline / Background**: Whether the Proposed Development would be viewed against the skyline or a background landscape may affect the level of contrast and magnitude. For example, skyline developments may appear more noticeable, particularly where they affect open and undeveloped horizons rather than being contained by a landscape in the background. Conversely, development may also appear more noticeable when viewed against a darker background landscape, such as forestry. In these cases, the magnitude of change would tend to be higher. If the Proposed Development adds to an already developed skyline the magnitude of change would tend to be lower;
- **Number**: Generally, the greater the number of separate development components seen simultaneously or sequentially, the higher the magnitude of change and this may lead to whole project effects (for example the visual effect of the solar farm and the substation). Further cumulative effects would occur in the case of separate, existing developments and their spatial relationship to each other would affect the magnitude of change. For example, development that appears as an extension to an existing development would tend to result in a lower magnitude of change than a separate, new development; and
- **Nature of Visibility**: The nature of visibility is a further factor for consideration. The Proposed Development may be subject to various phases of development change and the manner in which the development may be viewed could be intermittent or continuous and / or seasonally, due to periodic management or leaf fall.

Geographical Extent

6.10.18 The geographic extent over which the visual effects would be experienced is also assessed. This is distinct from the size or scale of effect and is described in terms of the physical area or location over which it would be experienced (described as a linear or area measurement). The extent of the effects would vary according to the specific nature of the Proposed Development and is principally assessed through ZTV, field survey and viewpoint analysis of the extent of visibility likely to be experienced by visual receptors. The geographical extent of visual effects is described as per the following examples:

- The geographical extent can be described as an area measurement or proportion of the total receptor affected. For example, effects on people within a particular area such as a golf course or area of common land can be illustrated via a ‘representative viewpoint’ that represents a similar visual effect, likely to be experienced by larger numbers of people within that area. The geographical extent of that visual effect can be expressed as approximately ‘5 hectares’ or ‘10%’ of the common land or a golf course area.

- The geographical extent can be described as a linear measurement (metres or kilometres) according to the length of route affected. For example, effects on people travelling on a route through the landscape such as a road or footpath can be illustrated via a 'representative viewpoint' that represents a similar visual effect, likely to be experienced by larger numbers of people along that route. The geographical extent of that visual effect can be expressed as approximately '2km' or '10%' of the total length of the route.
- The geographical extent of a visual effect experienced from a specific viewpoint may be limited to that location alone. (An example of a 'specific viewpoint' is a public viewpoint recommended in tourist literature such as a well visited hill summit. An example of an 'illustrative viewpoint' is a particular location within a built up or well vegetated area where an uncharacteristically open view exists).

Duration and Reversibility

6.10.19 The duration or time period over which a visual effect is likely to occur is judged on a scale of 'brief', 'short', 'medium' or 'long' term and is assessed for the Proposed Development as per the method described for landscape receptors above and set out in **Table 6A-9** below.

6.10.20 Reversibility is a separate, but linked consideration, also assessed for the Proposed Development as per the method described for landscape receptors above.

6.11 Magnitude of Change Rating (Two-Step Process)

6.11.1 The magnitude of landscape and visual change depends upon a combination of factors including size/scale of change, geographical extent and duration. Detailed descriptions of these factors specific to landscape and visual receptors are given above while the tables below apply a rating to the different levels of those factors.

Size or Scale of Change

Table 6A-7- Level of Size/Scale of Change

Criteria rating	Typical descriptors
High	**Visual** • Occupies a wide proportion of the view or would obstruct a significant portion of the view; and • The Proposed Development would become the dominant feature. **Landscape** • Considerable change to the majority / many existing landscape elements and/or landscape character; fundamental changes to the surroundings and baseline to a large extent; very noticeable.
Medium	**Visual**

Criteria rating	Typical descriptors
	• Occupies much of the view but would not fundamentally change its characteristics; and • Changes would be immediately visible but not a key feature of the view. **Landscape** • Some change to existing landscape elements and /or landscape character; discernible changes to the surroundings of a receptor, such that its baseline is partly altered; readily noticeable.
Low	**Visual** • Occupies a small portion of the view and would only slightly alter the view's composition. **Landscape** • Small change to existing landscape elements and/or landscape character; slight, but detectable impacts that do not alter the baseline of the receptor materially; not readily noticeable.
Negligible	**Visual** • Occupies little or no portion of the view and would not result in a change to the view's composition. **Landscape** • Little or limited /no change in existing landscape elements and/or landscape character, barely distinguishable change from baseline conditions; not noticeable.

Geographical Extent

Table 6A-8- Level of Geographical Extent

Criteria Rating	Description
High	The assessment location is representative of similar effects over an extensive geographic area. E.g., the change would influence multiple landscape types or character areas. The change would affect a large number of receptors and would have high influence on the perception of the landscape or view.
Medium	The assessment location is representative of similar effects over a moderate geographic area. E.g., the change would influence the landscape types or character areas within which the proposal lies. The change would affect a moderate number of receptors and would have moderate influence on the perception of the landscape or view.
Low	The assessment location represents a small geographic area. E.g., the change would influence the immediate setting of the site. The development would be perceived locally, with a minor effect on wider landscape character or views.
Negligible	The assessment location clearly represents a small geographic area. E.g., the change would influence the site level within the development site itself. The development

Criteria Rating	Description
	would be perceived only locally, with a limited effect on wider landscape character or views.

Duration and Reversibility

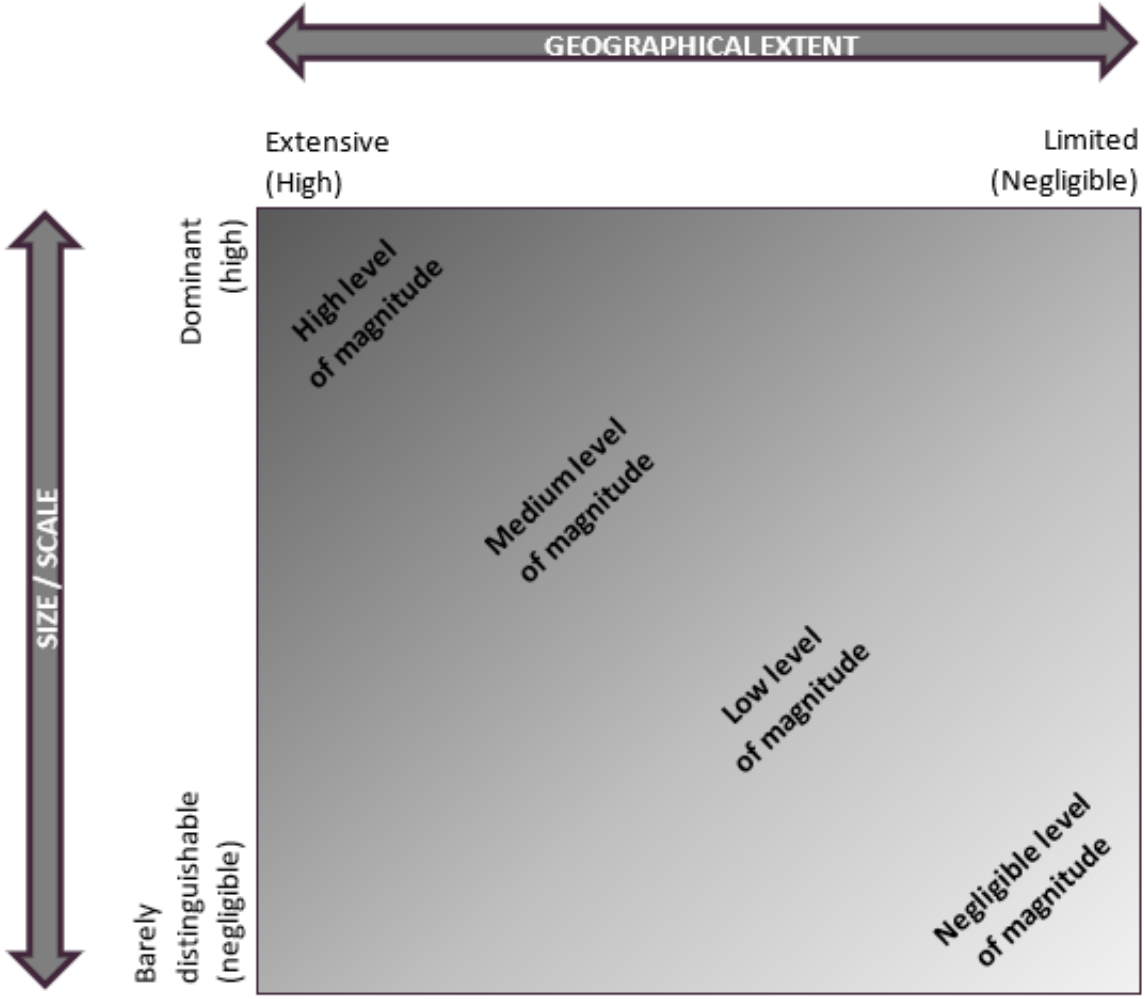
Table 6A-9- Duration of Change

Criteria Rating	Description
High	Long term / 10 years +
Medium	Medium term / 1-10 years
Low	Short term / up to 1 year
Negligible	Brief term / up to 2 months

Magnitude of Change

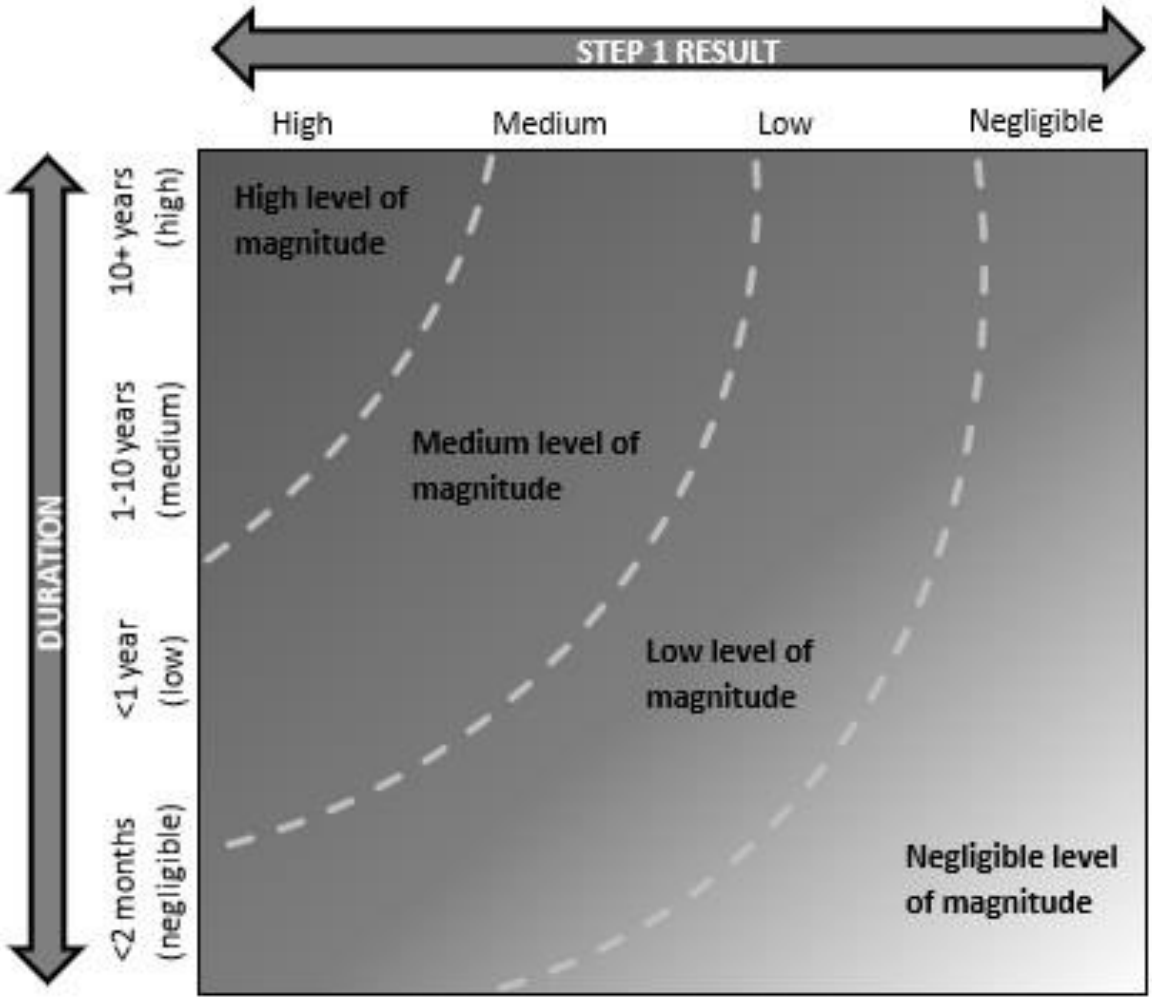
6.11.2 The following **Plate 6A-3** and **Plate 6A-4** illustrate how these aspects are combined through a two-step process. First by considering size and scale together with the geographical extent in step one. The result of this provides a preliminary magnitude of change result.

Plate 6A-3 - Magnitude of Change Diagram: Step 1



6.11.3 As illustrated below in the diagram presented as **Plate 6A-4**, for step two, the preliminary result from step 1 is then considered alongside the duration and reversibility which can either increase or decrease the rating accordingly. For example, a high magnitude of change could be reduced if this is only going to be experienced over a short period of time. This is typical of construction activities where they are both short term and of a temporary nature.

Plate 6A-4 - Magnitude of Change Diagram: Step 2



6.12 Assessing Cumulative Landscape and Visual Effects

6.12.1 Cumulative assessment considers the magnitude of change posed by multiple new developments that have the potential to be present or visible together within the landscape that would materially change the baseline situation.

6.12.2 The cumulative assessment follows a similar approach to the four stages set out in Planning Inspectorate (PINS) Guidance Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment [23]. In the absence of a single, agreed industry standard, the PINS Advice Note is considered the most appropriate approach to follow for a Proposed Development of this size. These comprise:

[23] Planning Inspectorate (2026). Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment. Available online at: https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment (Accessed: October 2026).

- **Stage 1**: Establish the Project's Zone of Influence (ZoI) and identify long list of 'cumulative developments'. For the assessment of landscape and visual effects, the Zone of Theoretical Visibility has formed the ZoI ;
- **Stage 2**: Develop a shortlist of 'cumulative developments' for the Cumulative Assessment by applying inclusion/exclusion criteria to the Stage 1 list;
- **Stage 3**: Information gathering; and
- **Stage 4**: Cumulative Assessment – the assessment is undertaken assuming that the short list of Committed Developments will implement appropriate mitigation as required by legislation, policy or through best practice measures.

6.12.3 The shortlist of Cumulative Developments to be considered for the Proposed Development is listed in **Chapter 2 – Approach to the EIA**. However, for the LVIA cumulative assessment this was reduced further to only include Cumulative Developments within 1km of the Site Boundary. As set out in previously in this methodology and demonstrated through the assessments in **Chapter 6** the potential for significant effects to arise as a result of the Proposed Development are limited to within 1km of the Site Boundary. Therefore, only Cumulative Developments within this area that would be perceived within shared views from sensitive receptors, or which would potentially result in a material change to the landscape context, would have the potential to result in significant cumulative effects derived from the Proposed Development.

6.12.4 Cumulative effects have been considered for the reduced short list of Cumulative Developments that could result in significant inter-project effects due their presence within the landscape and visual ZoI. The Cumulative Developments which have been scoped into the cumulative assessment are listed in **Chapter 6**. Considerations for scoping out Cumulative Developments from the LVIA cumulative assessment are due to one or more of the following:

- The relatively minor nature of the Cumulative Developments, attributable to the small scale, limited geographical extent or limited duration during construction of the Cumulative Developments, or combination of these factors;
- The Cumulative Development being of a different nature to the Proposed Development so as to have little inter-relationship and not cause significant landscape or visual effects;
- The appreciable amount, scale and/or density of built form and vegetation between the Committed Developments and the Proposed Development; and
- Not being covered by the ZTV generated for the Proposed Development so there would be no inter-visibility between them.

6.12.5 Cumulative developments are considered where they would result in a material change to baseline situation when experienced together with the Proposed Development. Such as construction activities taking place at the same time or the operational periods

overlapping. However, if another development is likely to take place before the construction of the Proposed Development this would considered as part of the future baseline as that would exist in the landscape and form part of the context into which the Proposed Development would be experienced.

6.12.6 Users of cumulative developments in the landscape will be considered as future visual receptors, as they do not yet exist but have the potential to experience views of the Proposed Development in the future. Assessment of effects to their visual amenity will follow the same methodology as existing visual receptors as set out above based on information that is readily available and accessible to the public such as planning application documentation and field observation made during site visits/appraisals.

6.13 Evaluation of Landscape and Visual Effects

6.13.1 Combining the stated measures of magnitude and sensitivity indicates the relative importance of different effects. This, combined with an oversight of professional judgement, allows us to evaluate effects and to determine significance their significance.

6.13.2 **Table 6A-10** provides general guidance on the inter-relationship between magnitude of change and sensitivity of receptor. However, this matrix is used as a framework and guide for consistency, not as a prescriptive formula: the level of effect and thus significance will vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors as set out in the previous sections.

Table 6A-10- Significance Matrix

	Magnitude				
Sensitivity	**Rating**	**High**	**Medium**	**Low**	**Negligible**
	High	Major	Moderate or Major	Minor or Moderate	Negligible
	Medium	Moderate or Major	Moderate	Minor	Negligible
	Low	Minor or Moderate	Minor	Negligible or Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

Type or Nature of Effect

6.13.3 The type or nature of effect is also described in terms of whether it is direct or indirect; its duration (temporary / permanent or reversible); whether the effects are cumulative; and whether the effect is positive, neutral or negative.

6.13.4 Transboundary effects are not relevant to this assessment as the LVIA Study Area for the Proposed Development would not overlap with the territory of another country.

Direct and indirect effects

6.13.5 GLVIA, paragraph 5.2 notes that landscape may be directly and indirectly affected by development and defines indirect effects as "*Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects*".

6.13.6 Direct landscape effects relate to the host landscape and concern both physical and perceptual effects on the receptor. Indirect landscape effects may also affect the host landscape as well as other landscapes, often separated by distance from the Proposed Development, as a consequence of views that affect the perceptual aspects of their character and key characteristics.

6.13.7 Visual effects are generally all considered as direct effects. An indirect visual effect may however be used to define a visual effect on a view that is not in the direction of the main view of the receptor as described by the following examples:

- Road users generally face the road directly ahead in the direction of travel and visual effects affecting those views may be described as direct effects. Where the visual effect is experienced in views oblique to the direction of travel they may be described as indirect; and
- Designed landscapes and vistas / viewpoints may be orientated in a particular direction and visual effects affecting those views may be described as direct effects. Where the visual effect is experienced in views oblique to the direction of the designed or main / primary view they may be described as indirect.

6.13.8 Secondary effects (or effects subsequent to an initial effect) are covered in this assessment by indirect effects.

Positive (beneficial) and negative (adverse) effects

6.13.9 Solar farms give rise to a wide range of opinions, from strongly adverse to strongly beneficial. However, LVIA is not an assessment of public opinion, although a precautionary approach has been taken, which assumes that the nature of the effects would be adverse or neutral unless otherwise stated.

6.13.10 Guidance provided by the in GLVIA3 on the nature of effect (i.e. beneficial or adverse) states that 'in the LVIA, thought must be given to whether the likely significant landscape and visual effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity', but it does not provide guidance as to how that may be established in practice. The nature of effect is

therefore one that requires interpretation and, where applied, this involves reasoned professional opinion.

6.13.11 In relation to many forms of development, the LVIA will identify 'beneficial' and 'adverse' effects by assessing these under the term 'Nature of Effect'. The landscape and visual effects of large-scale infrastructure are difficult to categorise in either of these brackets as, unlike other disciplines, there are no definitive criteria by which the effects can be measured as being categorically 'beneficial' or 'adverse'. In some disciplines, such as noise or ecology, it is possible to quantify the effect in numeric terms, by objectively identifying or quantifying the proportion of a receptor that is affected and assessing the nature of that effect in justifiable terms. However, this is not the case in relation to landscape and visual effects where the approach combines quantitative and qualitative assessment.

6.13.12 As a starting point, unless stated otherwise, the effects considered in the assessment will be considered to be adverse. Beneficial or neutral effects may, however, arise in certain situations and are stated in the assessment where relevant, based on the following definitions:

- Beneficial effects contribute to the landscape and visual resource through the enhancement of desirable characteristics or the introduction of new, beneficial attributes. The Proposed Development contributes to the landscape by virtue of good design or the introduction of new landscape planting. The removal of undesirable existing elements or characteristics can also be beneficial, as can their replacement with more appropriate components.
- Neutral effects occur where the Proposed Development fits with the existing landscape character or visual amenity. The Proposed Development neither contributes to or detracts from the landscape and visual resource and can be accommodated with neither beneficial or adverse effects, or where the effects are so limited that the change is hardly noticeable (very low magnitude). A change to the landscape and visual resource is not considered to be adverse simply because it constitutes an alteration to the existing situation.
- Adverse effects are those that detract from the landscape character or quality of visual attributes experienced, through the introduction of elements that contrast, in a detrimental way, with the existing characteristics of the landscape and visual resource, or through the removal of elements that are key in its characterisation.

Probability of Effect

6.13.13 The probability of cumulative effects is variable. Those effects related to existing developments and those under construction are considered as certain; effects related to development with planning consent are considered as likely. Development sites for which there is a submitted planning application are considered as uncertain with an even greater level of uncertainty attached to pre-planning application sites.

6.14 Determining the Significance of Effects

6.14.1 The landscape and visual assessment unavoidably, involves a combination of quantitative and qualitative assessment and wherever possible cross references will be made to objective evidence and baseline figures to support the assessment conclusions. Often a consensus of professional opinion has been sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach. Importantly, each effect results from its own unique set of circumstances and have been assessed on a case-by-case basis. The matrix should therefore be considered as a guide and any deviation from this guide will be clearly explained in the assessment.

6.14.2 As set out in **Chapter 2 – Approach to EIA,** using professional judgement and with reference to the relevant EIA regulations, it is important to determine whether the effects, assessed as a result of the Proposed Development, are likely to be significant. Significant landscape and visual effects relate to all those effects that result in a '**Major**' level of effect as indicated in **Table 6A-10**. Some '**Moderate**' levels of effect also have the potential, subject to the assessor's opinion, to be considered as significant and these exceptions will be explained as part of the assessment, where they occur. In accordance with the overall significance matrix in **Table 6A-10,** levels of effect of '**Minor**' or less are determined as 'not significant.'

6.14.3 For the purposes of proportionality and to ensure the effects that are significant are the key focus of this assessment, any landscape or visual receptors assigned a negligible level of sensitivity will not be further considered as part of the assessment on the basis that significant effects are highly unlikely.

6.14.4 Any receptors assigned an overall negligible level of effect at year 1 of operation will not be further considered or assessed in year 15 on the basis that effects are highly unlikely to increase to a level of significance at year 15 given year 1 is considered to present the worst-case scenario at operation.

6.15 Glossary of Terms and Abbreviations

Note: Descriptions marked with an asterisk are repeated from the GLVIA3 glossary.

Term/abbreviation	Definition
AOD	Above Ordnance Datum
AoV / FoV	Angle of View / Field of View
Artificial light	Light produced by electrical means.
CLVIA	Cumulative Landscape and Visual Impact Assessment

Term/abbreviation	Definition
Cumulative effects	'Additional changes caused by a Proposed Development in conjunction with other similar developments or as a combined effect of a set of developments, taken together' (GLVIA3, 2013 paragraph 7.3)
Cumulative landscape effects	Effects that 'can impact on either the physical fabric or character of the landscape, or any special values attached to it' (GLVIA3, 2013 paragraph 7.3)
Cumulative visual effects: In combination In succession Sequentially	Effects that can be caused by combined visibility, which 'occurs where the observer is able to see two or more developments from one viewpoint' and/or sequential effects which 'occur when the observer has to move to another viewpoint to see different developments' (GLVIA3, 2013 paragraph 7.3) • In combination: Where two or more developments are or would be within the observer's arc of vision at the same time without moving his/her head (GLVIA3, 2013 Table 7.1). • In succession: Where the observer has to turn his/her head to see the various developments – actual and visualised (GLVIA3, 2013 Table 7.1). • Sequential cumulative effect: Occurs where the observer has to move to another viewpoint to see the same or different developments. Sequential effects may be assessed for travel along regularly used routes such as major roads or popular paths (GLVIA3, 2013 Table 7.1).
Development*	Any proposal that results in change to the landscape and/or visual environment.
Degree of change	A combination of the scale, extent and duration of an effect also defined as 'magnitude'.
Designated Landscape*	Areas of landscape identified as being of importance at international, national or local levels, either defined by statue or identified in development plans or other documents.
Direct light	The artificial light source is visible. Note that light emanating from the window of a building is considered to be a 'direct' light source.
EIA	Environmental Impact Assessment
Elements*	Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.
Enhancement*	Proposals that seek to improve the landscape resource of the site and its wider setting beyond its baseline condition.
Environmental fit	The relationship of a development to identified environmental opportunities and constraints in its setting.

Term/abbreviation	Definition
Feature*	Particularly prominent or eye-catching elements in the landscape such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.
FoV	Field of View – the horizontal angle of the view illustrated in a visualisation.
GDL	Garden and Designed Landscape
Geographical Information System (GIS)	A system that captures, stores, analyses, manages and presents data linked to location. It links spatial information to a digital database.
GLVIA3	Guidelines for Landscape and Visual Impact Assessment, Third Edition, published jointly by the Landscape Institute and Institute of Environmental Management and Assessment, 2013.
Heritage	The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.
Historic Landscape Characterisation (HLC) and Historic Land-use Assessment (HLA)	Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area. HLC is the term used in England and Wales, HLA is the term used in Scotland.
Indirect effects*	Direct effects relate to the host landscape and concern both physical and perceptual effects on the receptor. Indirect effects relate to those landscapes and receptors which separated by distance or remote from the development and therefore are only affected in terms of visual or perceptual effects. The Landscape Institute also defines indirect effects as those which are not a direct result of the development but are often produced away from it or as a result of a complex pathway.
Indirect light	The light source is not visible but the light emanating from the source is apparent.
Infrared light	A type of light not visible to the human eye.
Iterative design process	The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.
Key characteristics	Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Land cover	The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.
Landscape and Visual Assessment (LVIA)	A tool used to identify and assess the likely effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.
Landscape Character Area (LCA)*	These are single unique areas which are the discrete geographical areas of a particular landscape type.

Term/abbreviation	Definition
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types (LCTs)*	Distinct types of landscape which are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement patterns, and perceptual and aesthetic attributes.
Landscape capacity	The amount of specified development or change which a particular landscape and the associated visual resource is able to accommodate without undue negative effects on its character and qualities. (NE 2019)
Landscape character*	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape classification	A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
Landscape constraints	Components of the landscape resource such as views or mature trees recognised as constraints to development. Often associated with landscape opportunities.
Landscape effects*	Effects on the landscape as a resource in its own right. An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern here is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. (GLVIA3 2013, Para 5.1).
Landscape fit	The relationship of a development to identified landscape opportunities and constraints in its setting.
Landscape patterns	Spatial distributions of landscape elements combining to form patterns, which may be distinctive, recognisable and describable e.g. hedgerows and stream patterns.
Landscape quality (condition)*	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape qualities	A term used to describe the aesthetic or perceptual and intangible characteristics of the landscape such as scenic quality, tranquillity, sense of wildness or remoteness. Cultural and artistic references may also be described here.

Term/abbreviation	Definition
Landscape receptors *	Defined aspects of the landscape resource that have the potential to be affected by a proposal
Landscape resource	The combination of elements that contribute to landscape context, character, and value.
Landscape sensitivity	The sensitivity of the landscape to a particular development considers the susceptibility of the landscape and its value.
Landscape strategy	The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular landscape type or area as a whole, usually expressed in formally adopted plans and programmes or related documents.
Landscape value*	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons. The value of the Landscape Character Types or Areas that may be affected, based on review of any designations at both national and local levels, and, where there are no designations, judgements based on criteria that can be used to establish landscape value.
Level of effect	Determined through the combination of sensitivity of the receptor and the proposed magnitude of change brought about by the development.
LLA	Local Landscape Area
Magnitude (of effect)*	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short term or long term in duration.
MCA	Marine Character Area
Mitigation	Measures which are proposed to prevent, reduce and where possible offset any adverse effects (or to avoid, reduce and if possible remedy identified effects. (GLVIA3, 2013 Para 3.37).
Natural light	Light supplied by the sun, directly or indirectly, the moon and stars.
Perception	Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).
Perceptual Aspects	A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity. (GLVIA3, 2013 Box 5.1)
Beneficial or Adverse Types of Landscape Effect	The landscape effects may be beneficial, neutral, or adverse. In landscape terms – a beneficial effect would require development to add to the landscape quality and character of an area. Neutral landscape effects would include low or negligible changes that may be considered as part of the 'normal' landscape processes such as maintenance or harvesting activities. An adverse effect may include the loss of landscape

Term/abbreviation	Definition
	elements such as mature trees and hedgerows as part of construction leading to a reduction in the landscape quality and character of an area.
Beneficial or Adverse Types of Visual Effect	The visual effects may be beneficial, neutral, or adverse. In visual terms – beneficial or adverse effects are less easy to define or quantify and require a subjective consideration of a number of factors affecting the view, which may be beneficial, neutral, or adverse. Opinions as to the visual effects of solar energy developments vary widely, however it is not the assumption of this assessment that all change, including substantial levels of change is an adverse experience. Rather this assessment has considered factors such as the visual composition of the landscape in the view together with the design and composition, which may or may not be reasonably, accommodated within the scale and character of the landscape as perceived from the receptor location.
Probability of Effect	The probability of a landscape and visual effect occurring as a result of this Development should be regarded as certain, subject to the stated project design and the continuance of the existing, baseline landscape resource, including known changes such as other permitted solar farm development. The probability of cumulative effects however is variable. Whereas those effects related to existing solar energy development and those under construction are considered as certain, effects related to development with planning consent are only considered as likely. Solar energy development sites for which there is a submitted planning application are considered as uncertain and other solar energy development for which no planning application has been made are considered as uncertain / unknown, as the level of uncertainty would be greater.
Rarity	The presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type. (GLVIA3 2013, Box 5.1)
Receptor	Physical landscape resource, special interest, or viewer group that will experience an effect.
Recreation Value*	Evidence that the landscape is valued for recreational activity where experience of the landscape is important. (GLVIA3 2013, Box 5.1)
Representativeness*	Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples.
Residual effects	Likely environmental effects, remaining after mitigation.
Scale Indicators	Landscape elements and features of a known or recognisable scale such as houses, trees, and vehicles that may be compared to other objects, where the scale of height is less familiar, to indicate their true scale.
Scenic quality	Depends upon perception and reflects the particular combination and pattern of elements in the landscape, its aesthetic qualities, its more intangible sense of place or ‘genius loci’ and other more intangible qualities. (GLVIA3 2013, Box 5.1)

Term/abbreviation	Definition
Seascape	Landscapes with views of the coast or seas, and coasts and adjacent marine environments with cultural, historical and archaeological links with each other.
Sense of Place (genius loci)	The essential character and spirit of an area: 'genius loci' literally means 'spirit of the place'.
Sensitivity*	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value associated to that receptor.
SLA	Special Landscape Area
Susceptibility*	The ability of a defined landscape or visual receptor to accommodate the specific Proposed Development without undue negative consequences.
Sustainability*	The principle that the environment should be protected in such a condition and to such a degree that ensures new development meets the needs of the present without compromising the ability of future generations to meet their own needs.
Temporary or permanent effects	Effects may be considered as temporary or permanent.
Time depth	Historical layering – the idea of landscape as a 'palimpsest', a much written-over asset of landscape.
Type or Nature of effect	Whether an effect is direct or indirect, temporary or permanent, beneficial (positive), neutral or adverse (negative) solus or cumulative.
Viewpoints	Selected for illustration of the visual effects fall broadly into three groups: Representative Viewpoints: selected to represent the experience of different types of visual receptor, where larger numbers of viewpoints cannot all be included individually and where the visual effects are unlikely to differ – for example certain points may be chosen to represent the view of users of particular public footpaths and bridleways. Specific Viewpoints: chosen because they are key and sometimes promoted viewpoints within the landscape, including for example specific local visitor attractions, such as landscapes with statutory landscape designations or viewpoints with particular cultural landscape associations. Illustrative Viewpoints: chosen specifically to demonstrate a particular effect or specific issues, which might, for example, be the restricted visibility at certain locations. (GLVIA3 2013, Para 6.19)
Visual amenity	The overall views and surroundings, which provide a visual setting or backdrop to the activities of people living, working, participating in recreational activities, visiting or travelling through an area.
Visual dominance	A visual effect often referred to in respect of residential properties that in relation to development would be subject to blocking of views, or reduction of light / shadowing, and high levels of visual intrusion.

Term/abbreviation	Definition
Visual effect*	Effects on specific views and on the general visual amenity experienced by people.
Visual Receptors*	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visual sensitivity	The sensitivity of visual receptors such as residents, relative to their location and context, to visual change proposed by development.
Visualisation	Computer visualisation, photomontage, or other technique to illustrate the appearance of the development from a known location.
WCP	Wales Coast Path
Zone of Theoretical Visibility (ZTV)*	A map, usually digitally produced, showing areas of land within which, a development is theoretical visible.