Renewable Energy Study

Landscape Sensitivity Assessment

Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

Final report

Prepared by LUC

January 2025



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Chapter 1
Introduction

Background to this study

1.1 This study forms part of an evidence base for the emerging Strategic and Local Plan (SLP) for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council. Working in partnership, the respective authorities are in the process of delivering a Strategic and Local Plan for the region, which will provide an overarching planning strategy and cross-boundary strategic policies covering the whole area, as well as local policies for each local authority. As part of the evidence base for the SLP, the three councils must consider whether the landscape has the capacity to accommodate new renewable energy development without causing significant adverse effects on landscape character.

1.2 The SLP area commissioned LUC to prepare a Landscape Sensitivity Assessment (LSA) covering the three authority areas (together referred to herein as the 'study area'). This Landscape Sensitivity Assessment for wind energy and ground mounted solar photovoltaic (PV) schemes provides judgements on the landscape sensitivity of different parts of the SLP area to these forms of development at a strategic level. Other forms of renewable energy technology such as roof-mounted solar PV and ground source heat pumps are not considered within the scope of this study, as they are small-scale developments which either fall under permitted development rights, and/or cannot be considered at a landscape scale. Similarly, battery storage developments are not included due to their small scale and potential to be co-located with new renewable energy development schemes.

1.3 The findings of this study will allow the Councils to identify broad areas for renewable energy development and establish a local policy framework for such

development, in line with the National Planning Policy Framework (paragraph 160).

Policy context

European Landscape Convention

1.4 The European Landscape Convention (ELC) came into force in the UK in March 2007. It established the need to recognise landscape in law; and develop landscape policies dedicated to the protection, management, and planning of landscapes; and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies. The ELC remains relevant despite the UK's departure from the EU.

1.5 The ELC definition of 'landscape' recognises that all landscapes matter, be they ordinary, degraded, or outstanding:

> "Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

1.6 Signing up to the ELC means that the UK is committed to protect, manage, and plan our landscapes for the future. The Convention also advocates work to raise landscape awareness, involvement and enjoyment amongst local and visiting communities. Landscape character is defined by the ELC as "a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse". Again, this reinforces the underlying message that 'all landscapes matter'.

National Planning Policy Framework (NPPF)

1.7 The UK Government published the latest version of the National Planning Policy Framework (NPPF) in December 2023, which sets out the environmental, social and economic planning policies for England. Central to NPPF policies is a presumption in favour of sustainable development; that development should be planned for positively and individual proposals should be approved wherever possible.

1.8 One of the overarching objectives that underpins the NPPF is set out in Paragraph 8: "*an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment*".

1.9 Paragraph 180 states that "*planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes*" and "*recognising the intrinsic character and beauty of the countryside*".

1.10 The NPPF also makes explicit reference to the need for defined strategic policies that make sufficient provision for climate change mitigation and adaptation, landscape and green infrastructure (paragraph 20).

1.11 Paragraph 160 states that "*to help increase the use and supply of renewable and low carbon energy and heat, plans should:*

1. *provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*

2. *consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development…"*

National Planning Policy Guidance (NPPG)

1.12 Further guidance is provided in the NPPG on how local planning authorities can identify suitable areas for renewable and low carbon energy. It states that:

> "…when considering impacts, assessments can use tools to identify where impacts are likely to be acceptable. For example, landscape character areas could form the basis for considering which technologies at which scale may be appropriate in different types of location..."

1.13 This study uses the framework of Landscape Character Areas and Landscape Character Types for the landscape sensitivity assessment as set out in the 2017 Landscape Character Assessment for The Cotswolds National Landscape (AONB) **[See reference** 1**]** and the 2006 Gloucestershire Landscape Character Assessment **[See reference** 2**]**.

Local Policy

Current Joint Core Strategy (2011-2031)

1.14 The current Joint Core Strategy (JCS) was adopted in December 2017. A partnership between Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council. It is the strategic plan that covers a twenty-year period (2011-2031), addressing cross-boundary planning matters. The JCS provides strategic policies for the local authorities, in accordance with paragraphs 20 – 23 of the NPPF. Relevant policies include:

- **Policy SD6: Landscape:** Development will seek to protect landscape character for its own intrinsic beauty and for its benefit to economic, environmental and social well-being;

- **Policy SD7: The Cotswolds Area of Outstanding Natural Beauty (AONB):** All development proposals in or within the setting of the Cotswolds National Landscape (AONB) will be required to conserve and, where appropriate, enhance its landscape, scenic beauty, wildlife, cultural heritage and other special qualities. Proposals will be required to be consistent with the policies set out in the Cotswolds National Landscape Management Plan.
- **Policy SD8 Historic Environment, paragraph 3:** Designated and undesignated heritage assets and their settings will be conserved and enhanced as appropriate to their significance, and for their important contribution to local character, distinctiveness and sense of place. Consideration will also be given to the contribution made by heritage assets to supporting sustainable communities and the local economy. Development should aim to sustain and enhance the significance of heritage assets and put them to viable uses consistent with their conservation whilst improving accessibility where appropriate.
- **Policy SD9 Biodiversity and Geodiversity:** The biodiversity and geological resource of the JCS area will be protected and enhanced in order to establish and reinforce ecological networks that are resilient to current and future pressures. Improved community access will be encouraged so far as is compatible with the conservation of special features and interests.
- **Policy INF5: Renewable Energy/Low Carbon Energy Development:** Proposals for the generation of energy from renewable resources, or low carbon energy development (with the exception of wind turbines), will be supported, provided the wider environmental, social or economic benefits of the installation would not be outweighed by a significant adverse impact on the local environment, taking into account the following factors:
  - The impact (or cumulative impact) of the scheme, including any associated transmission lines, buildings and access roads, on landscape character, local amenity, heritage assets or biodiversity;
  - any effect on a protected area such as The Cotswolds National Landscape (AONB) or other designated areas such as the Green Belt; and

- any unacceptable adverse impacts on users and residents of the local area, including emissions, noise, odour and visual amenity.

1.15 In addition to the JCS, each local authority has produced a local plan to support and complement the JCS policies. These are outlined below.

Gloucester City Plan (2011-2031)

1.16 The current local plan for Gloucester City was adopted in January 2023. Relevant policies include:

1.17 Policy E1: Biodiversity and geodiversity - Development proposals must demonstrate the conservation of biodiversity, in, addition to providing net gains appropriate to the ecological network. Potential adverse impacts on natural environment assets including the connectivity of the ecological network, must be avoided or satisfactorily mitigated.

1.18 Policy F2: Landscape and Planting: Planning applications for major development proposals where landscaping is to be considered, must be accompanied by a landscape scheme, incorporating hard landscape and planting details.

The Cheltenham Plan (2012-2031)

1.19 The Cheltenham local plan ('The Cheltenham Plan') was adopted in July 2020. Relevant policies include:

- **Policy L1: Landscape and Setting:** Development will only be permitted where it would not harm the setting of Cheltenham including views into or out of areas of acknowledged importance.

1.20 Also of relevance to this study is information in Chapter 18: Renewable Energy and Low Carbon Development, Paragraph 18.2, which states that *"the*

Renewable Energy Study produced for Gloucestershire County Council by Entec in 2010 considered there to be very little potential for renewable energy generation from wind, given the built-up nature of the district" Paragraph 18.3 continues "for this reason, no further work has been undertaken on this matter since the Entec study. As a result, and given the unlikelihood of wind energy proposals coming forward in future, the Cheltenham Plan does not include a policy that relates to wind energy generation, nor does it seek to identify sites that may be suitable for harnessing the wind energy resource."

Tewkesbury Borough Plan (2011-2031)

1.21 The Tewkesbury Borough Plan was adopted in June 2022. Relevant policies include:

1.22 Policy LAN1: Special Landscape Areas - Proposals for new development within Special Landscape Areas, as identified on the Policies Map, will be permitted providing: The proposal would not cause harm to those features of the landscape character which are of significance; The proposal maintains the quality of the natural and built environment and its visual attractiveness, and all reasonable opportunities for the enhancement of landscape character and the local environment are sought.

1.23 Policy LAN2: Landscape Character: All new development must be appropriate to, and integrated into, its landscape setting with relevant landscape features and characteristics conserved, and where possible enhanced, with regard to the Gloucestershire Landscape Character Assessment (2006) and the Cotswolds AONB Landscape Character Assessment (2003).

1.24 Policy ENV3 Solar Farms: In considering proposals for large scale, stand-alone solar photovoltaic installations priority will be given to sites on previously developed land or non-agricultural land. Where the proposed use of agricultural land is shown to be necessary priority will be given to poorer quality agricultural land. Proposals located on the best and most versatile agricultural land will only be permitted where there is compelling evidence to justify its use.

Proposals on agricultural land should allow for the continued agricultural use of the site and/or encourage biodiversity improvements around arrays.

Cotswolds National Landscape (AONB)

1.25 The Cotswolds National Landscape (AONB) is located across the south-eastern part of the study area. Special qualities include the Cotswold escarpment, the unifying character of the limestone geology and its visible presence in the landscape, The high wolds with commons, 'big' skies and long-distance views, distinctive dry-stone walls and settlements in the Cotswold vernacular, flower-rich grasslands and ancient broadleaved woodland, and a rich historic environment with archaeological, prehistoric and historic associations dating back 6,000 years.

1.26 The current Management Plan **[See reference 3]** was published in 2023 and covers the period to 2025. Relevant policies include:

- **Policy CC1: Climate Change mitigation** - Generating energy from low carbon sources in a manner consistent with the purpose of National Landscape designation: All developments, should have a net zero operational carbon balance and 100% energy provided by low carbon sources. Alternatives to fossil fuel energy sources should be used.
- **Policy CE1: Landscape:**
  - **Policy CE1.1**: Proposals that are likely to impact on, or create change in, the landscape of the Cotswolds National Landscape, should have regard to, be compatible with, and reinforce the landscape character of the location, as described by the Cotswolds Conservation Board's Landscape Character Assessment and Landscape Strategy and Guidelines. There should be a presumption against the loss of key characteristics identified in the landscape character assessment.
  - **Policy CE1.2**: Proposals that are likely to impact on, or create change in, the landscape of the Cotswolds National Landscape, should have regard to the scenic quality of the location and its setting and ensure

that views – including those into and out of the National landscape – and visual amenity are conserved and enhanced.

1.27 The Cotswolds National Landscape Climate Change Strategy (2022) **[See reference** 4**]** sets out actions to increase the resilience of the Cotswolds landscapes to climate change, seeking to take a landscape led-approach, and aligning with the statutory purpose of the National Landscape designation. Relevant objectives include:

- **Objective L5:** "Seek to ensure landscape, landscape character and the special qualities of the Cotswolds are part of the decision making process and are taken into account within Climate Change Strategies, Local Nature Recovery Strategies, Woodland Strategies etc" and;
- **Objective L6:** "Ensure decisions involving landcover change (especially tree planting) take account of how historic pattern of locations, scale and other key characteristics have shaped landscape."

1.28 The Cotswolds National Landscape Conservation Board have also produced a Renewable Energy Position Statement (adopted June 2023) which states that *"In principle, the Board would be supportive of all of forms of renewable energy at a small-scale, provided that relevant considerations have been adequately addressed. Large-scale forms of renewable energy are unlikely to be compatible with the statutory purpose of conserving and enhancing the natural beauty of Areas of Outstanding Natural Beauty (AONBs), such as the CNL."* **[See reference** 5**]**

Chapter 2

Method

Scope of the assessments

2.1 The landscape sensitivity assessments focus on the landscape considerations associated with ground-mounted solar photovoltaic (PV) and wind energy developments at a strategic level.

Spatial framework for the assessment

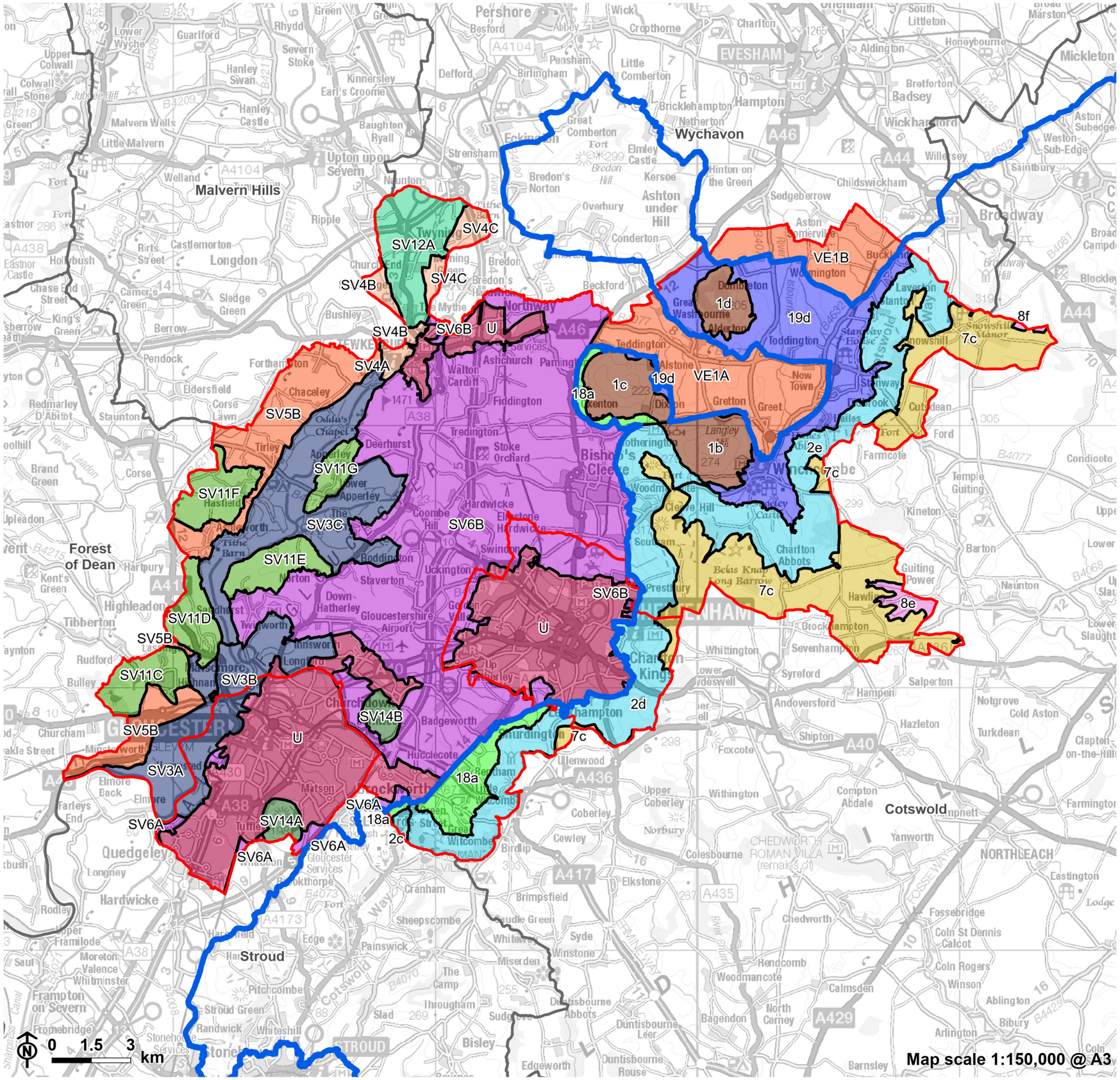
2.2 The assessment uses the spatial framework of Landscape Character Types (LCTs) and component Landscape Character Areas (LCAs) identified in the Cotswolds AONB Landscape Character Assessment (2017) and the Gloucestershire County Landscape Character Assessment (2006). These are shown in **Figure 2.1.**

2.3 It will also utilise information from other relevant landscape studies including the Joint Core Strategy Landscape Characterisation Assessment and Sensitivity Analysis. The Gloucestershire LCA identifies a broad framework of 10 Landscape Character Types (LCTs) with 30 component Landscape Character Areas (LCAs). Areas classified as Urban are excluded from the assessment. Some LCTs extend beyond the boundary of the study area. The assessment has only looked at the areas of these LCTs which fall within the study area.

Renewable Energy Assessment
for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

LUC

Figure 2.1 Landscape character types and areas



- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment

- 1 Escarpment Outliers
- 2 Escarpment
- 7 High Wold
- 8 High Wold Valley
- 18 Settled Unwooded Vale
- 19 Unwooded Vale

Gloucester Various Vales Landscape Character Assessment

- SV3 Floodplain Farmland
- SV4 Riverside Meadows
- SV6 Settled Unwooded Vale
- SV11 Vale Hillocks
- SV12 Low Hills and Commons
- SV14 Escarpment Outlier
- VE1 Unwooded Vale
- U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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Characteristics of solar PV and wind energy development types and their potential landscape impacts

Solar PV developments

2.4 Solar PV developments although not prominent in terms of height, can occupy substantial areas of ground which may be visible, particularly if located on slopes. Landscape effects may include the following:

- Solar PV developments may be particularly visible in open landscapes or on upper slopes of hillsides or where overlooked;
- On a sunny day they can appear blue, while on a cloudy day they can appear a dark grey, both of which contrast with surrounding green areas;
- The presence of Solar PV panels and associated infrastructure may increase the perceived human influence on the landscape and erode intrinsically rural character;
- Solar PV development will change the land use and appearance of a field or fields, affecting land cover patterns;
- The regular edges of solar PV developments may be conspicuous in more irregular landscapes (particularly where field boundaries are irregular);
- The height of racks (up to 3 metres) may overtop typical hedgerow field boundaries;
- Screen planting around solar PV developments may change the sense of enclosure of a landscape;
- Construction of solar PV development may result in damage to landscape features such as hedgerow field boundaries and alter the landscape scale; and

- Structures may appear out of place in particularly wild or undeveloped landscape which are valued for their qualities of remoteness.

Wind energy developments

2.5 All turbines considered in this study are substantial vertical structures that may be highly visible within the landscape. Wind energy developments may affect the landscape in the following ways:

- Construction of turbines and related infrastructure may result in the direct loss of landscape features e.g. trees and hedgerows;
- The movement of the blades is a unique feature of wind energy development, setting them apart from other stationary tall structures in the landscape, and may affect characteristics of stillness and remoteness;
- The presence of turbines may increase the influence of built development on the landscape;
- Turbines may be perceived as out of scale in relation to human scale features in the landscape e.g. farmsteads, rural lanes, walls and hedgerows;
- Turbines on skylines may compete with existing skyline features (e.g. church towers) for prominence, where prominent undeveloped skylines or landmark features are characteristic of the landscape; and
- Access tracks or upgrades on access routes may be highly visible, particularly in open upland landscapes or undeveloped landscapes.

Type and scale of solar PV developments considered

2.6 The assessment considers the landscape sensitivity of the landscape within the study area to ground-mounted solar PV developments. Such developments

consist of ‘arrays’ of solar PV panels, usually around three metres in height and mounted on aluminium/stainless steel frames, with associated infrastructure including inverters, on-site powerhouse, security fencing and CCTV. Solar PV developments in domestic gardens or roof mounted panels are outside the scope of this study.

2.7 The assessment judges the suitability of different scales of solar PV developments, based on bandings that reflect those that are most likely to be put forward by developers. The sizes used for the assessment are set out below, with the approximate MW equivalent):

- Very small solar PV installation: Up to 1 hectare (equivalent to <1 MW)
- Small solar PV installation: 1 to 5 hectares (equivalent to 1-4 MW)
- Medium solar PV installation: 5 to 20 hectares (equivalent to 5-15 MW)
- Large solar PV installation: 20 to 50 hectares (equivalent to 16-40 MW)
- Very large solar PV installation: 50 to 120 hectares (equivalent to 41-100 MW)

2.8 Proposed solar PV developments larger than 120 hectares have not been considered in this assessment. Landscape sensitivity to these very large schemes would be categorised as “high” sensitivity regardless of location, requiring developers to pay particular attention to this issue in their specific applications.

Type and scale of wind energy developments considered

2.9 For wind energy, the assessment considers five scenarios, as set out below:

- Small wind turbines: 25-60m tip height
- Medium wind turbines: 60-100m tip height

- Large wind turbines: 100-150m tip height
- Very large wind turbines: 150-220m tip height

2.10 The LSA does not include assessment of the potential cumulative impacts of multiple developments as different combinations of development are not known at this stage. Further information on cumulative effects is included below.

Cumulative effects

2.11 As larger numbers of renewable energy developments are built, it is increasingly necessary to consider their cumulative effects. Cumulative effects of multiple schemes are a significant issue for planning authorities, particularly for free standing solar PV developments, which tend to cluster around grid connection points.

2.12 The most significant cumulative effects are those that result in changes in the character of a landscape to such an extent as to transform it into a different landscape type. It should be recognised that if numerous developments are built, then at some point another development could tip the balance through its additional effects.

2.13 Key considerations are how different developments relate to each other, their frequency as one moves through the landscape, and their visual separation. These are most appropriately considered at the individual site level, including through the process of Cumulative LVIA. Additional information on the LVIA and Cumulative LVIA process are included in Appendix A.

Evaluating landscape sensitivity

2.14 This assessment draws on advice contained in Natural England's 'Approach to landscape sensitivity assessment' (2019) which supersedes 'Techniques and criteria for judging capacity and sensitivity' (Natural England,

2002). This describes the term ‘landscape sensitivity’, within the context of spatial planning and land management, as follows:

> “Landscape sensitivity may be regarded as a measure of the resilience, or robustness, of a landscape to withstand specified change arising from development types or land management practices, without undue negative effects on the landscape and visual baseline and their value.”

2.15 It is a term applied to landscape character and the associated visual resource, combining judgements of their susceptibility to the specific development type/development scenario or other change being considered together with the value(s) related to that landscape and visual resource.

Assessment criteria

2.16 Landscape sensitivity assessment requires judgements on both landscape susceptibility (how vulnerable the landscape is to change from the type being assessed, in this case solar PV and wind energy developments) and landscape value (consensus about importance, which can be recognised through designation as well as through descriptions within the Landscape Character Assessment.

2.17 The selection of landscape sensitivity indicators (‘criteria’) for this study is informed by the attributes of landscape that could be affected by solar and wind energy development. These consider the ‘landscape’, ‘visual’ and ‘perceptual’ aspects of sensitivity. Their selection is also based on current best practice and experience of LUC in undertaking similar studies elsewhere in the UK.

2.18 The following five criteria headings are used for this study:

- Landform and scale (including sense of openness/enclosure);
- Landcover (including field and settlement patterns);

- Historic landscape character;
- Visual character (including skylines); and
- Perceptual and scenic qualities.

2.19 The following text provides guidance and examples of higher and lower sensitivity features/attributes for applying the criteria for solar PV and wind energy, respectively. The assessments present a commentary against each criterion to inform the judgements on levels of sensitivity. It is important to note that the relative importance of each criterion varies between landscapes (due to differences in landscape character). The initial stage of the assessment involved a thorough desk-based study drawing on sources of spatial and descriptive information regarding the landscape (see Appendix B). This was supplemented by field survey work undertaken by a team of landscape professionals to verify the findings.

Solar PV assessment criteria

Landform and scale (including sense of openness/enclosure)

2.20 A flat or gently undulating lowland landscape or extensive plateau is likely to be less sensitive to solar PV development than a landscape with prominent landforms and visible slopes. This is because arrays of solar PV panels will be less easily perceived in a flat landscape than on a slope (including hills and knolls), especially higher slopes.

2.21 A landscape with a strong sense of enclosure (e.g. provided by land cover such as woodland, tree cover or high hedges) is likely to be less sensitive to solar PV development than an open and unenclosed landscape because these features will be able to provide screening.

Table 2.1: Landscape and scale defined by the five point landscape sensitivity scale

Scale	Definition
Low	An extensive lowland flat landscape or plateau, often a larger scale landform. A very well enclosed landscape – e.g. with fields bounded by high hedges and dense tree/woodland cover.
Low-Moderate	A simple gently rolling landscape, likely to be a medium-large scale landform. Some enclosure provided by hedges and tree/woodland cover.
Moderate	An undulating landscape, perhaps also incised by valleys, likely to be a medium-scale landform, with hidden areas as well as some visible slopes. Some areas lacking screening by field boundaries or tree cover, whilst others might have a greater sense of enclosure owing to a denser occurrence of these features.
Moderate-High	A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may contain prominent, visible slopes with little sense of enclosure (low, few or no hedges or trees/areas of woodland).
High	A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform. The landform may be very steep with exposed, visible slopes and no field boundaries or tree cover to provide screening.

Landcover (including field and settlement patterns)

2.22 Since solar PV panels introduce a new land cover (of built structures), landscapes containing existing hard surfacing or built elements (e.g. urban areas, brownfield sites or large-scale horticulture) are likely to be less sensitive to field-scale solar PV development than highly rural or naturalistic landscapes.

Landscapes with small-scale, more irregular field patterns are likely to be more sensitive to the introduction of solar PV development than landscapes with large, regular scale field patterns because of the risk of diluting or masking the characteristic landscape patterns. This would be particularly apparent if development takes place across a number of adjacent fields where the field pattern is small and intricate (bearing in mind that the height of panels could exceed that of a hedge or stone wall).

Table 2.2: Landcover defined by the five point landscape sensitivity scale

Scale	Definition
Low	A landscape with large-scale, regular fields of mainly modern origin. An urban or 'brownfield' landscape.
Low-Moderate	A landscape which is mainly defined by large, modern fields or those sub-divided for non-traditional uses, e.g. horse keeping. An area of large-scale horticulture or some urban or brownfield influences.
Moderate	A landscape with a mixture of large-scale, modern fields and some smaller, more historic enclosure. A rural landscape, perhaps with some brownfield sites or urban influences.
Moderate-High	A landscape dominated by ancient, small-scale field patterns with a few isolated areas of modern enclosure and/or with some areas of semi-natural land cover.
High	A landscape characterised by small-scale, ancient field patterns and/or a landscape dominated by semi-natural land cover.

Historic landscape character

2.23 Landscapes which contain important archaeological or historic features or historic associations are likely to have a higher level of sensitivity to solar PV development. Historical features may be in the form of historic land cover types

and field systems, areas of buried archaeology, historic landscapes such as Registered Parks and Gardens or buildings/structures designated for their historical significance.

2.24 Areas which make a significant contribution to the setting of a historical feature or landscape may also have higher sensitivity to solar PV development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to solar PV development.

Table 2.3: Historic and landscape character defined by the five point landscape sensitivity scale

Scale	Definition
Low	A landscape with relatively few historic features important to the character of the area and little time depth (i.e. large intensively farmed fields).
Low-Moderate	A landscape with a small number of historic features important to the character area and some time depth.
Moderate	A landscape with some visible historic features of importance to character, and a variety of time depths.
Moderate-High	A landscape with many historic features important to the area and a strong sense of time depth.
High	A landscape with a high density of historic features important to the character of the area and great time depth

Visual character (including skylines)

2.25 The relative visibility of a landscape may influence its sensitivity to solar PV development. An elevated landscape such as a hill range or plateau, which is viewed from other landscapes, may be more sensitive than an enclosed landscape, since any solar panels will be more widely seen. Landscapes which have important visual relationships with other areas, for example where one

area provides a backdrop to a neighbouring area (which may be a designated landscape such as a National Landscape/National Park), are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether adjacent landscapes provide a setting for one another.

2.26 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to solar PV development because panels may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines if not sited appropriately. Important landmark features on the skyline might include historic features or monuments as well as landforms. Where skylines are affected by development, e.g. through the presence of electricity pylons, the addition of solar panels may lead to visual confusion due to differences in scale. Therefore, developed skylines might not necessarily indicate lower sensitivity.

Table 2.4: Visual character defined by the five point landscape sensitivity scale

Scale	Definition
Low	An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
Low-Moderate	A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features – other skylines in adjacent LCTs may be more prominent.
Moderate	A landscape which has some inter-visibility with neighbouring areas. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
Moderate-High	A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A

Scale	Definition
	landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.
High	A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as National Landscape /National Park. A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.

Perceptual and scenic qualities

2.27 Landscapes that are relatively remote or tranquil tend to be more sensitive to solar PV development, since solar panels may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which have a perceived naturalness or a strong feel of traditional rurality, will therefore be more sensitive. Qualities such as tranquillity can be found even in settled areas, where the influence of overtly modern development is reduced. Solar PV development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.28 Landscapes that have a high scenic quality (including those within a designated landscape) will be more sensitive. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, National Landscape/National Park Management Plans and noted from fieldwork.

Table 2.5: Perceptual and scenic qualities defined by the five point landscape sensitivity scale

Scale	Definition
Low	A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land.
Low-Moderate	A landscape with much human activity and modern development, such as industrial areas. A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements.
Moderate	A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes. A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within a National Landscape.
Moderate-High	A rural landscape with some modern development and human activity, such as intensive farmland. A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as a National Landscape.
High	A more naturalistic landscape and/or one with little modern human influence and development. A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Wind energy assessment criteria

Landform and scale (including sense of openness/enclosure)

2.29 A flat or gently sloping landform is likely to be less sensitive to wind energy development than a landscape with a dramatic rugged landform, distinct landform features (including prominent hills and valleys) or pronounced undulations. Larger scale landforms are likely to be less sensitive than smaller scale landforms – because turbines may appear out of scale, detract from visually important landforms or appear visually confusing (due to turbines being at varying heights) in the latter types of landscapes. Landscapes with frequent human scale features, such as settlements, farmsteads, small farm woodlands, trees and hedges may be particularly sensitive to larger turbines. This is because large features such as wind turbines may dominate smaller scale features within the landscape.

Table 2.6: Landscape and scale defined by the five point landscape sensitivity scale

Scale	Definition
Low	An extensive lowland flat landscape or plateau with few/no human-scale features; often a larger scale landform.
Low-Moderate	A simple gently rolling landscape with occasional human-scale features such as trees and domestic buildings; likely to be a medium-large scale landform.
Moderate	An undulating landscape, perhaps also incised by valleys, likely to be a medium scale landform, with hidden areas as well as some visible slopes.
Moderate-High	A landscape with distinct landform features, and/or irregular in topographic appearance (which may be large in scale), or a smaller scale landform. The landscape may

Scale	Definition
	contain prominent, visible slopes and frequent human-scale features.
High	A landscape with a rugged landform or dramatic landform features (which may be large in scale), or a small scale or intimate landform often with a dense distribution of human-scale features, such as woodland. The landform may be very steep with exposed, visible slopes.

Landcover (including field and settlement patterns)

2.30 Simple, regular landscapes with extensive areas of consistent land cover are likely to be less sensitive to wind energy development than landscapes with more complex or irregular land cover patterns, smaller and/or irregular field sizes.

Table 2.7: Landcover defined by the five point landscape sensitivity scale

Scale	Definition
Low	An open, continuous landscape with uniform land cover, or an urban or 'brownfield' landscape.
Moderate-Low	A landscape of large open fields of modern enclosure, with little variety inland cover. A landscape which contains areas of brownfield sites or urban influences.
Moderate	A landscape with medium sized fields (or a mix of modern and historic enclosure) and some variations in land cover. A rural landscape which may contain some brownfield sites or urban influences.
Moderate-High	A landscape with irregular or small-scale fields and a variety in land cover. A rural landscape, perhaps with some areas of semi-natural land cover.

Scale	Definition
High	A landscape with a strong variety in land cover, complex field patterns and/or semi-natural land cover. The field pattern may be characterised by small-scale, ancient fields.

Historic and landscape character

2.31 Landscapes which contain important archaeological or historic features or historic associations are likely to have a higher level of sensitivity to wind energy development. Historical features may be in the form of historic land cover types and field systems, areas of buried archaeology, historic designed landscapes such as a Registered Park and Garden, or buildings/structures designated for their historical significance.

2.32 Areas which make a significant contribution to the setting of a historical feature or landscapes may also have higher sensitivity to wind energy development. Landscapes that are primarily of modern influence and origin will have a lower sensitivity to wind energy development.

Table 2.8: Historic and landscape character defined by the five point landscape sensitivity scale

Scale	Definition
Low	A landscape with relatively few historic features important to the character of the area, and little time depth (i.e. large intensively farmed fields).
Moderate-Low	A landscape with a small number of historic features important to the character area, and some time depth.
Moderate	A landscape with some visible historic features of importance to character, and a variety of time depths.

Scale	Definition
Moderate-High	A landscape with many historic features important to the area and a strong sense of time depth.
High	A landscape with a high density of historic features (many designations) important to the character of the area and great time depth.

Visual character (including skylines)

2.33 The relative visibility of a landscape may influence its sensitivity to wind development. An elevated landscape such as a hill range or plateau, which is viewed from other landscapes, may be more sensitive than a landscape with limited visibility. Landscapes which have important visual relationships with other areas, for example where one area provides a backdrop to a neighbouring area (which may be a designated landscape such as a National Landscape/National Park), are considered more sensitive than those with few visual relationships. The extent of inter-visibility may be modified by the importance of these views to appreciation of the landscape, and whether adjacent landscapes provide a setting for one another.

2.34 Prominent and distinctive and/or undeveloped skylines, or skylines with important landmark features, are likely to be more sensitive to wind energy development because turbines may detract from these skylines as features in the landscape, or draw attention away from existing landform or landmark features on skylines. Important landmark features on the skyline might include historic features or monuments as well as landforms. Where skylines are affected by development, e.g. through the presence of electricity pylons or existing turbines, the addition of turbines of a different scale may lead to visual confusion. Therefore, the presence of existing development cannot always assume a lower sensitivity to new development.

Table 2.9: Visual character defined by the five point landscape sensitivity scale

Scale	Definition
Low	An enclosed, self-contained landscape, or one with weak connections to neighbouring areas. A landscape in which skylines are not prominent, and there are no important landmark features on the skyline.
Moderate-Low	A landscape with limited connections to neighbouring areas, and/or where adjacent landscapes are not visually related. A landscape in which skylines are simple, flat or gently convex and/or there are very few landmark features on the skyline – other skylines in adjacent LCTs may be more prominent.
Moderate	A landscape which has some intervisibility with neighbouring areas, and/or where relationships between adjacent landscapes are of more importance. A landscape with some prominent skylines, but these are not particularly distinctive – there may be some landmark features on the skyline.
Moderate-High	A landscape which is intervisible with several areas, and/or where adjacent areas are strongly interrelated. A landscape with prominent skylines that may form an important backdrop to views from settlements or important viewpoints, and/or with important landmark features.
High	A landscape which has important visual relationships with one or more neighbouring areas. It or the landscape(s) it is visible from is designated as a National Landscape/National Park. A landscape with prominent or distinctive undeveloped skylines, or with important landmark features on skylines.

Perceptual and scenic qualities

2.35 Landscapes that are relatively remote or tranquil tend to be more sensitive to wind energy, since turbines may be perceived as intrusive. Landscapes which are relatively free from overt human activity and disturbance, and which

have a perceived naturalness or a strong feel of traditional rurality, will therefore be more sensitive. Qualities such as tranquillity can be found even in settled areas, where the influence of overtly modern development is reduced. Wind energy development will generally be less intrusive in landscapes which are strongly influenced by modern development, including settlement, industrial and commercial development and infrastructure.

2.36 Landscapes that have a high scenic quality (including those within the National Landscapes) will be more sensitive to wind energy development. Scenic qualities can include contrasts and combinations of landform and landcover. Scenic qualities are recorded in the Landscape Character Assessment, National Landscape Management Plan and noted from fieldwork.

Table 2.10: Perceptual and scenic qualities defined by the five point landscape sensitivity scale

Scale	Definition
Low	A landscape without attractive character, with no pleasing combinations of features, visual contrasts and/or dramatic elements, such as industrial areas or derelict land. A landscape with much human activity and modern development, such as industrial areas.
Low-Moderate	A landscape of limited attractive character, with few pleasing combinations of features, visual contrasts and/or dramatic elements. A rural or semi-rural landscape with much human activity and dispersed modern development, such as settlement fringes.
Moderate	A landscape of intermittently attractive character, with occasional pleasing combinations of features, visual contrasts and/or dramatic elements. Some may be within a designated landscape. A rural landscape with some modern development and human activity, such as intensive farmland.
Moderate-High	A landscape of attractive character, with some pleasing combinations of features, visual contrasts and/or dramatic elements. Most or all may be designated as a National

Scale	Definition
	Landscape. A more naturalistic landscape and/or one with little modern human influence and development.
High	A landscape of consistently attractive character, with pleasing combinations of features, visual contrasts and/or dramatic elements. All or the vast majority is designated for its scenic qualities. A tranquil landscape with little or no overt sign of modern human activity and development.

Making overall judgements on landscape sensitivity

2.37 As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria').

2.38 There may be one criterion that has a strong influence on landscape sensitivity in a particular LCT (or LCA) which increases the overall landscape sensitivity score (an example for solar PV might be a landscape with a prominent/highly visible ridgeline, or significant coverage of semi-natural habitats). There may also be criteria that produce conflicting scores. For example, a small-scale landscape with historic field patterns may also afford greater screening of panels from topography and a dense network of hedgerows. A conflicting example for wind could be in the context of a settled landscape. While it would have a greater human influence (indicating a lower sensitivity to new development), it would also contain more human-scale features that could be affected by large-scale wind turbines (indicating a higher sensitivity). Conversely, a more remote landscape is likely to lack human-scale features but is likely to present a higher sensitivity from a perceptual point of view.

2.39 In these situations, a professional judgement is made on overall landscape sensitivity, taking all criteria into account in the context of their importance to the landscape character and quality of the individual LCT/LCA. This is expressed on five point scale from 1 to 5, with a score of 1 representing that the landscape is likely to experience a greater impact on landscape character as a result of a given development type/scale and a score of 5 representing that the impact on landscape is like to be lesser.

Presentation of results

2.40 The full landscape sensitivity assessments for each of the LCTs are presented in separate assessment profiles. These are structured as follows:

- A map of the LCT, with component Character Areas and representative photographs;
- A summary description of the LCT against each of the assessment criteria, giving a landscape sensitivity assessment rating for both development types;
- An overall discussion on the landscape sensitivity of the LCT to new solar PV and wind energy developments, referencing particular features, attributes or locations which may be more or less sensitive;
- Landscape sensitivity scores for new solar PV and wind energy development within each of the different development scenarios, using the five-point scale from low to high; and
- Discussion of any variations to the overall LCT scores at the LCA level.

2.41 The next chapter sets out the overall results of the assessments.

Chapter 3

Landscape Sensitivity Assessment Results

3.1 The LCTs within the study area contain areas of higher and lower landscape sensitivity that vary from the overall scores. It is therefore very important to take note of the content of the individual assessment profiles, including any commentary which highlights areas which could be more sensitive to solar PV or wind energy developments.

3.2 The overall results of the landscape capacity assessment are set out in Tables 3.1 to 3.10 for sensitivity to solar PV development, and Tables 3.11 to 3.20 for sensitivity to wind energy development.

3.3 Figures 3.1 to 3.5 present a spatial representation of the landscape sensitivity to new solar PV development (by the five different size bandings). These are followed by **Figures 3.6 to 3.9** which show the overall sensitivity to the four different size scenarios for wind energy development.

3.4 These maps should always be referred to alongside the individual assessment profiles which set out the scores and reasonings behind them.

Landscape sensitivity scores to new solar PV developments

Table 3.1: Unwooded Vale LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Teddington and Greet Vale (VE1A)	Moderate	Moderate	Moderate-High	High	High
Wormington Vale Fringe (VE1B)	Moderate	Moderate	Moderate-High	High	High
Ashleworth, Tirley and Forthampton Vale (5B)	Low-Moderate	Low-Moderate	Moderate	High	High
Vale of Evesham Fringe (19D)	Moderate	Moderate	Moderate-High	High	High

Table 3.2: Riverside Meadows LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Severn Ham, Tewkesbury (SV4A)	Low-Moderate	Moderate	High	High	High
Mythe Meadows (SV4B)	Low	Low-Moderate	High	High	High
Twyning and Upham Meadows (SV4C)	Low-Moderate	Moderate	High	High	High

Table 3.3: Settled Unwooded Vale LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Vale of Berkeley (SV6A)	Low	Low-Moderate	Moderate	Moderate-High	High
Vale of Gloucester (SV6B)	Low	Low-Moderate	Moderate	Moderate-High	High
Vale of Gloucester Fringe (18a)	Low-Moderate	Moderate	Moderate-High	High	High

Table 3.4: Low Hills and Commons LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Twyning Hills (SV12A)	Low	Low-Moderate	Moderate	Moderate-High	High

Table 3.5: Floodplain Farmlands LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
The Severn Hams (Gloucester to Tewkesbury South) (SV3C)	Low-Moderate	Low-Moderate	Moderate	High	High
The Rea, Maismore Ham and Longford (SV3B)	Low-Moderate	Low-Moderate	Moderate	High	High
Elmore Back and Minsterworth Ham (SV3A)	Low-Moderate	Low-Moderate	Moderate	High	High

Table 3.6: Vale Hillocks LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Lassington and Rodway Hills (SV11C)	Low-Moderate	Moderate	Moderate-High	High	High
Woolridge Hill (SV11D)	Low-Moderate	Moderate	Moderate-High	High	High
Sandhurst and Norton Hills (SV11E)	Low-Moderate	Moderate	Moderate-High	High	High
Corse Wood & Barrow Hills (SV11F)	Low-Moderate	Moderate	Moderate-High	High	High
Apperley Hill (SV11G)	Low-Moderate	Moderate	Moderate-High	High	High

Table 3.7: Escarpment Outliers LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Robins Wood Hill (SV14A)	Moderate	Moderate-High	High	High	High
Churchdown/Chosen Hill (SV14B)	Moderate	Moderate-High	High	High	High
Langley Hill (1B)	Moderate-High	High	High	High	High
Oxenton and Dixton Hills (1C)	Moderate-High	High	High	High	High
Dumbleton and Alderton Hills (1D)	Moderate-High	High	High	High	High

Table 3.8: Escarpment LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Winchcombe to Dover's Hill (2e)	Moderate-High	High	High	High	High
Cooper's Hill to Winchcombe (2D)	Moderate-High	High	High	High	High
Uley to Cooper's Hill (2C)	Moderate-High	High	High	High	High

Table 3.9: High Wold LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Cotswolds High Wold Plateau (7C)	Moderate	Moderate-High	High	High	High

Table 3.10: High Wold Valley LCT

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Upper Windrush Valley (8E)	Moderate-High	High	High	High	High

LCA	Very small (up to 1ha)	Small (1-5ha)	Medium (5-20ha)	Large (20-50ha)	Very large (50-120ha)
Upper Dikler Valley (8F)	Moderate-High	High	High	High	High

Landscape sensitivity scores to new wind energy developments

Table 3.11: Unwooded Vale LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Teddington and Greet Vale (VE1A)	High	High	High	High
Wormington Vale Fringe (VE1B)	High	High	High	High
Ashleworth, Tirley and Forthampton Vale (5B)	Moderate-High	Moderate-High	High	High
Vale of Evesham Fringe (19D)	High	High	High	High

Table 3.12: Riverside Meadows LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Severn Ham, Tewkesbury SV4A	Moderate-High	High	High	High
Mythe Meadows SV4B	Moderate	Moderate-High	High	High
Twyning and Upham Meadows SV4C	Moderate-High	High	High	High

Table 3.13: Settled Unwooded Vale LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Vale of Berkeley (SV6A)	Low	Moderate	Moderate-High	High
Vale of Gloucester (SV6B)	Low	Moderate	Moderate-High	High
Vale of Gloucester Fringe (18a)	Low-Moderate	Moderate-High	High	High

Table 3.14: Low Hills and Commons LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Twyning Hills (SV12A)	Low-Moderate	Moderate	High	High

Table 3.15: Floodplain Farmland LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
The Severn Hams (Gloucester to Tewkesbury South) (SV3C)	Low-Moderate	Moderate	High	High
The Rea, Maismore Ham and Longford (SV3B)	Low-Moderate	Moderate	High	High
Elmore Back and Minsterworth Ham (SV3A)	Low-Moderate	Moderate	High	High

Table 3.16: Vale Hillocks LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Lassington and Rodway Hills (SV11C)	Moderate	Moderate-High	High	High
Woolridge Hill (SV11D)	Moderate	Moderate-High	High	High
Sandhurst and Norton Hills (SV11E)	Moderate	Moderate-High	High	High
Corse Wood & Barrow Hills (SV11F)	Moderate	Moderate-High	High	High
Apperley Hill (SV11G)	Moderate	Moderate-High	High	High

Table 3.17: Escarpment Outliers LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Robins Wood Hill (SV14A)	Moderate-High	High	High	High
Churchdown/Chosen Hill (SV14B)	Moderate-High	High	High	High

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Langley Hill (1B)	High	High	High	High
Oxenton and Dixton Hills (1C)	High	High	High	High
Dumbleton and Alderton Hills (1D)	High	High	High	High

Table 3.18: Escarpment LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Winchcombe to Dover's Hill (2E)	High	High	High	High
Cooper's Hill to Winchcombe (2D)	High	High	High	High
Uley to Cooper's Hill (2C)	High	High	High	High

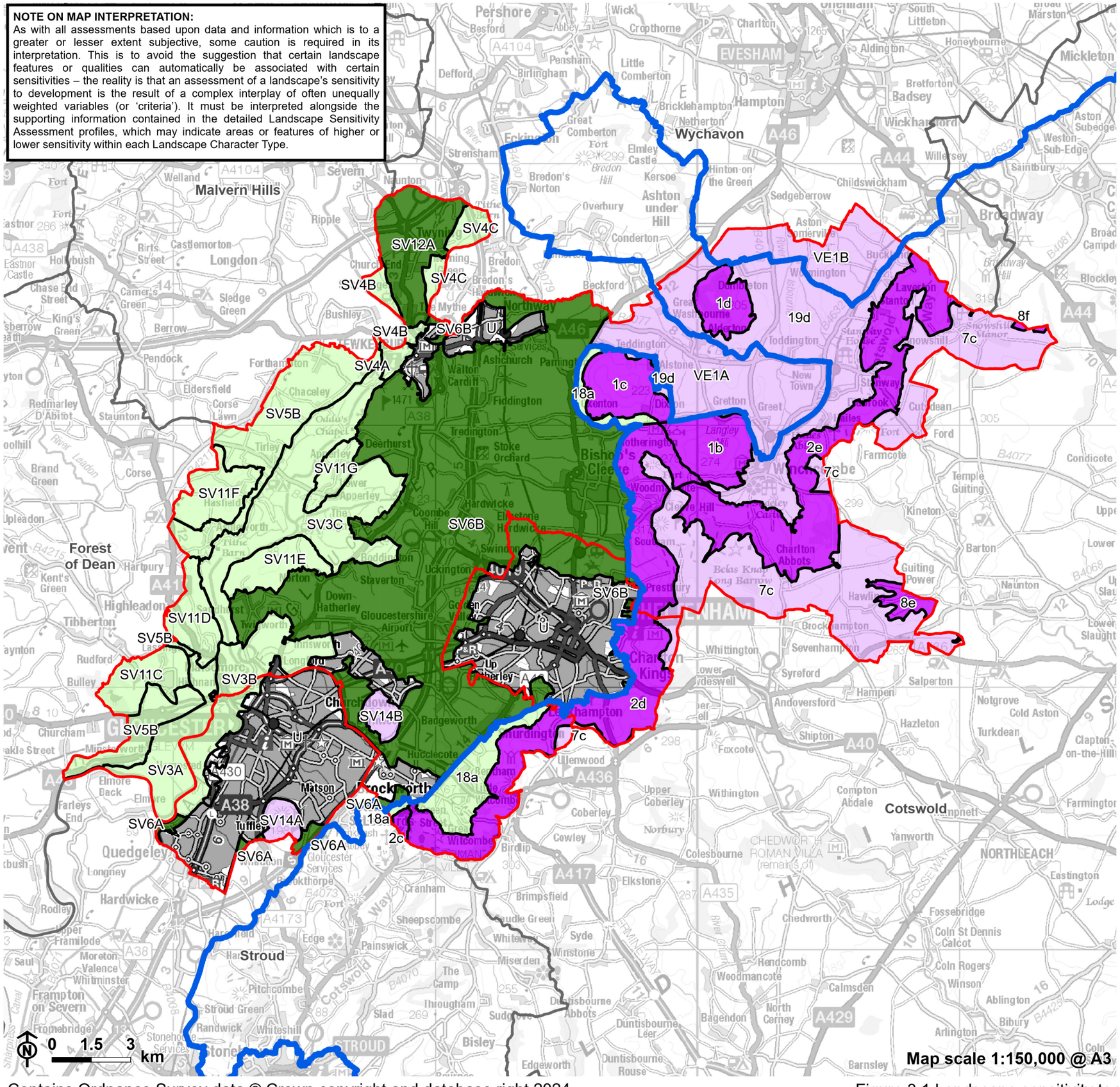
Table 3.19: High Wold LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Cotswolds High Wold Plateau (7C)	Moderate-High	High	High	High

Table 3.20: High Wold Valley LCT

LCA	Small (25-60 metres)	Medium (60-100 metres)	Large (100-150 metres)	Very large (150-220 metres)
Upper Windrush Valley (8E)	High	High	High	High
Upper Dikler Valley (8F)	High	High	High	High

NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



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for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

LUC

Figure 3.1 Landscape sensitivity to very small-scale solar energy development (1ha or less)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

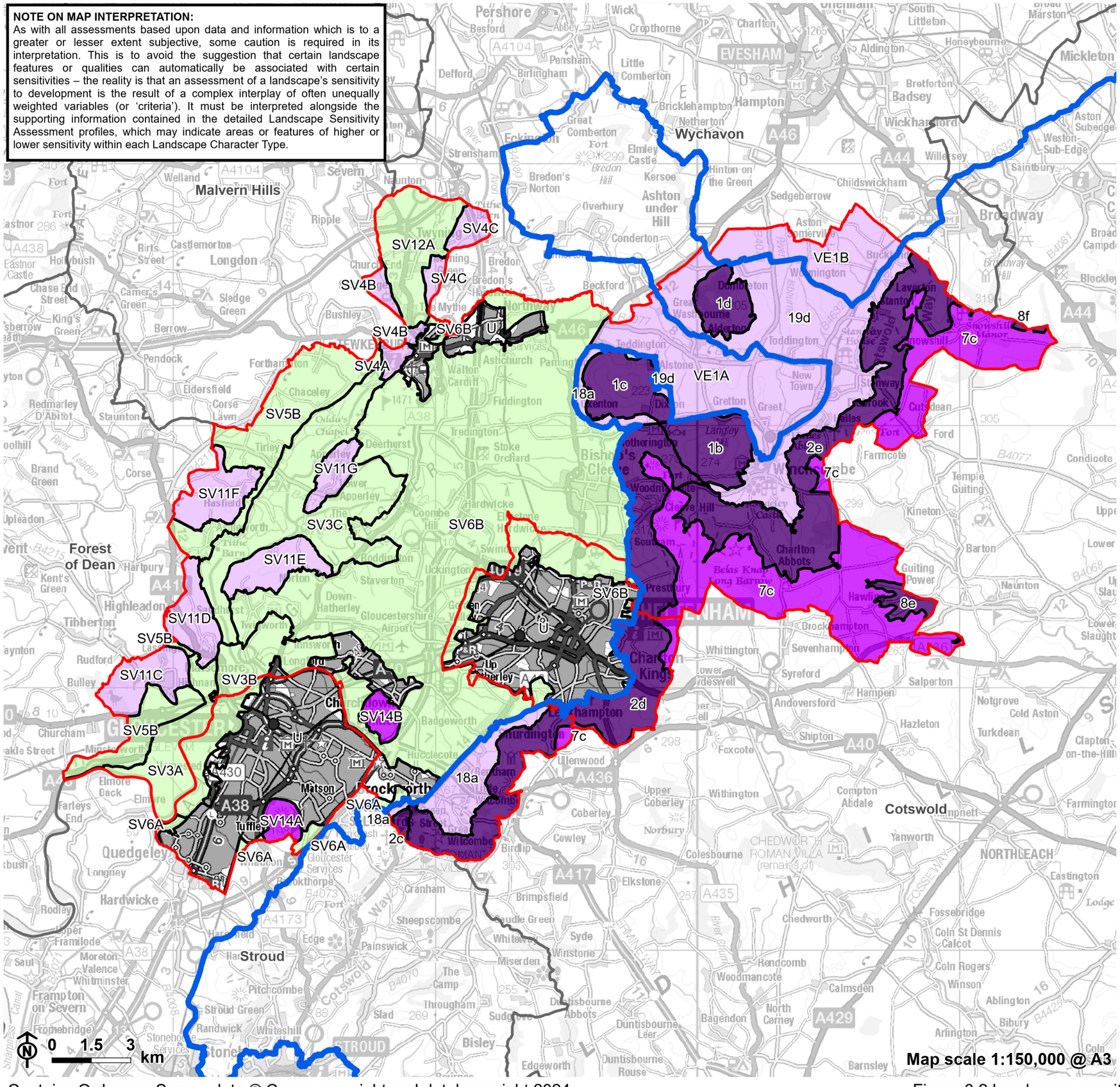
Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



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Figure 3.2 Landscape sensitivity to small-scale solar energy development (1 to 5ha)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

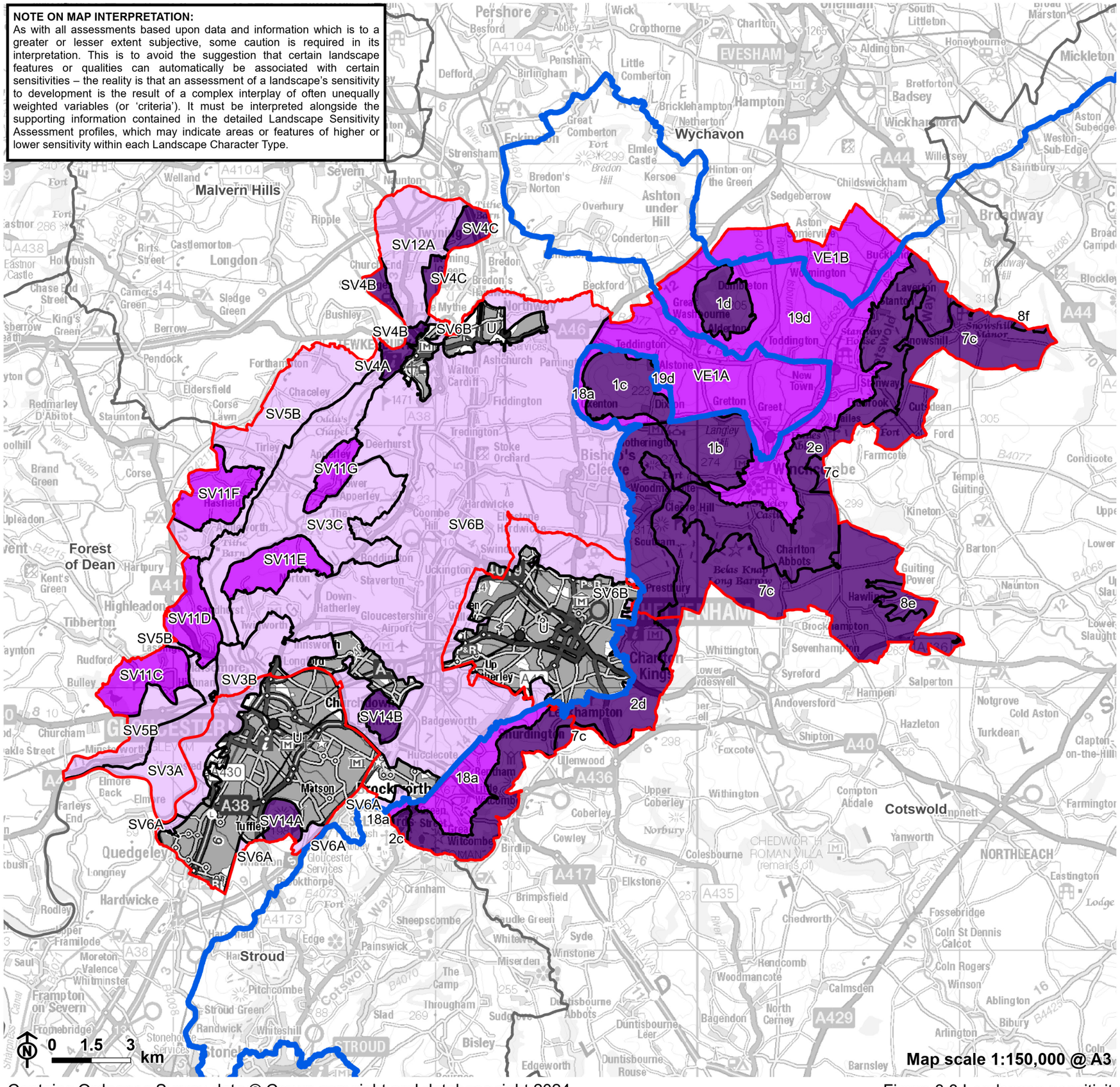
Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



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Figure 3.3 Landscape sensitivity to medium-scale solar energy development (5 to 20ha)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

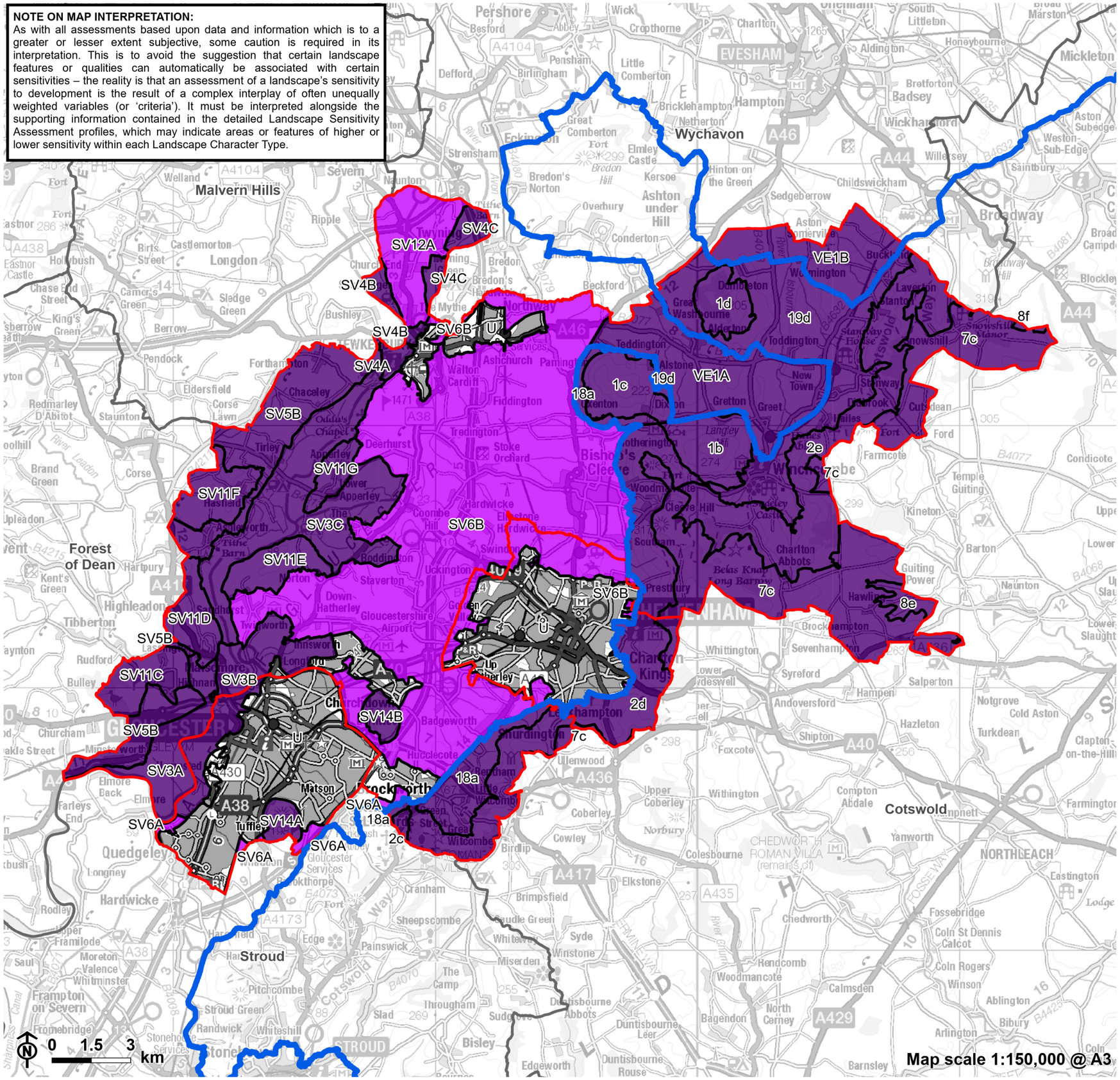
Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



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Figure 3.4 Landscape sensitivity to large-scale solar energy development (20 to 50ha)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

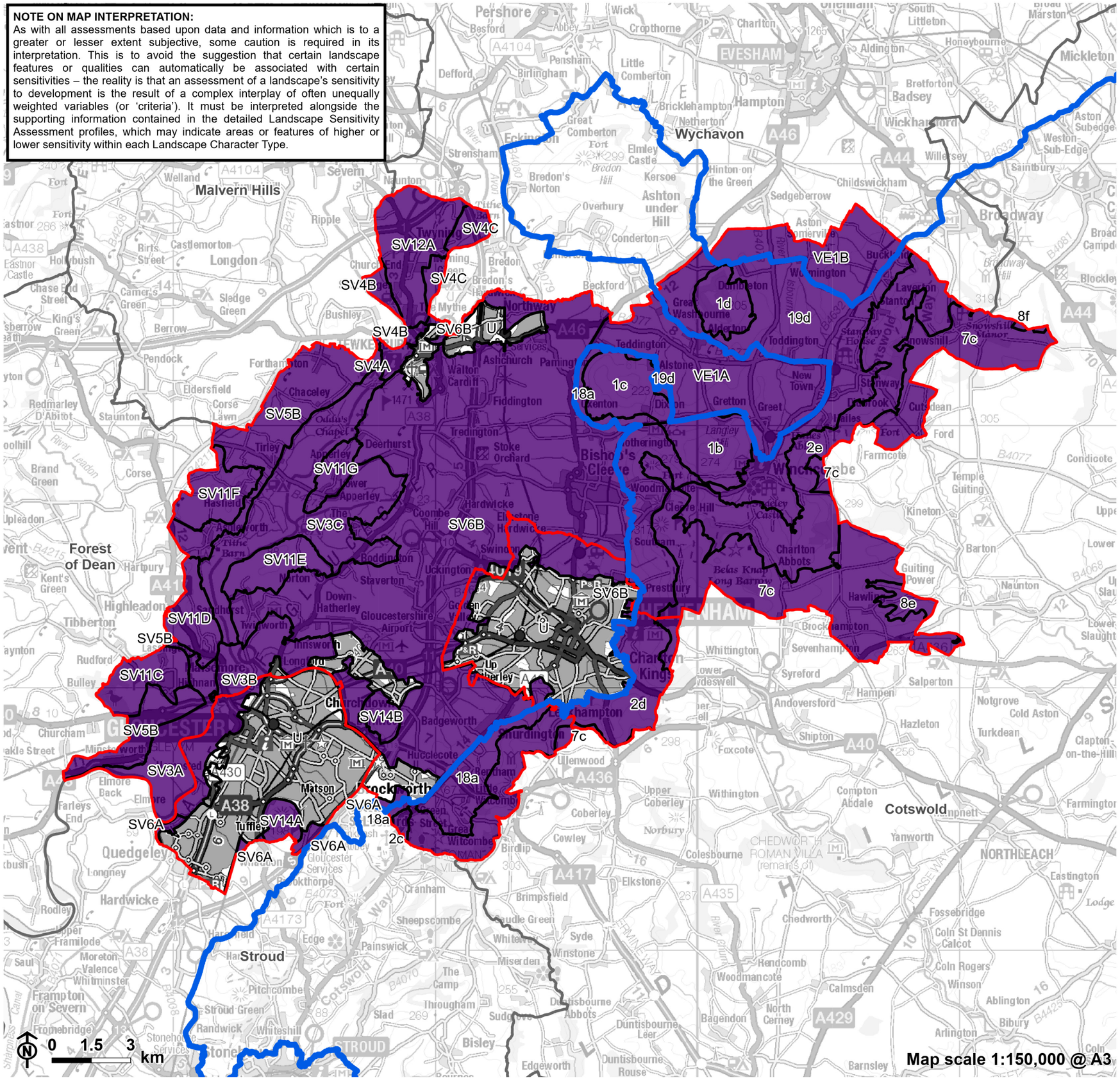
Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



Renewable Energy Assessment
for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

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Figure 3.5 Landscape sensitivity to very large-scale solar energy development (50 to 120ha)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

Gloucester Various Vales Landscape Character Assessment:

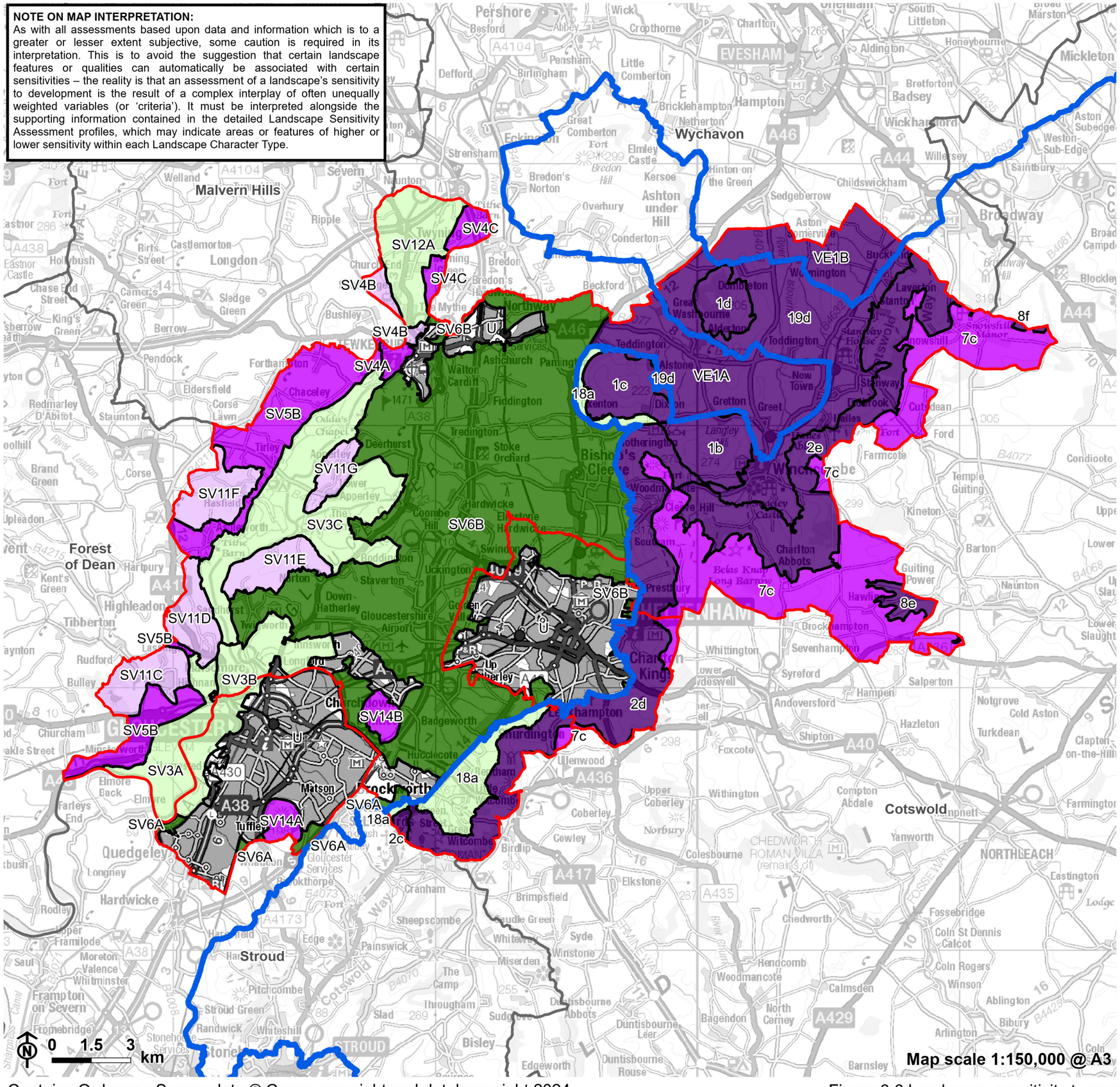
SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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Figure 3.5 Landscape sensitivity to very large-scale solar energy development (50 to 120ha)
27/06/2024 EB:spears_d

NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



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for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

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Figure 3.6 Landscape sensitivity to small-scale wind energy development (25 to 60m tip height)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

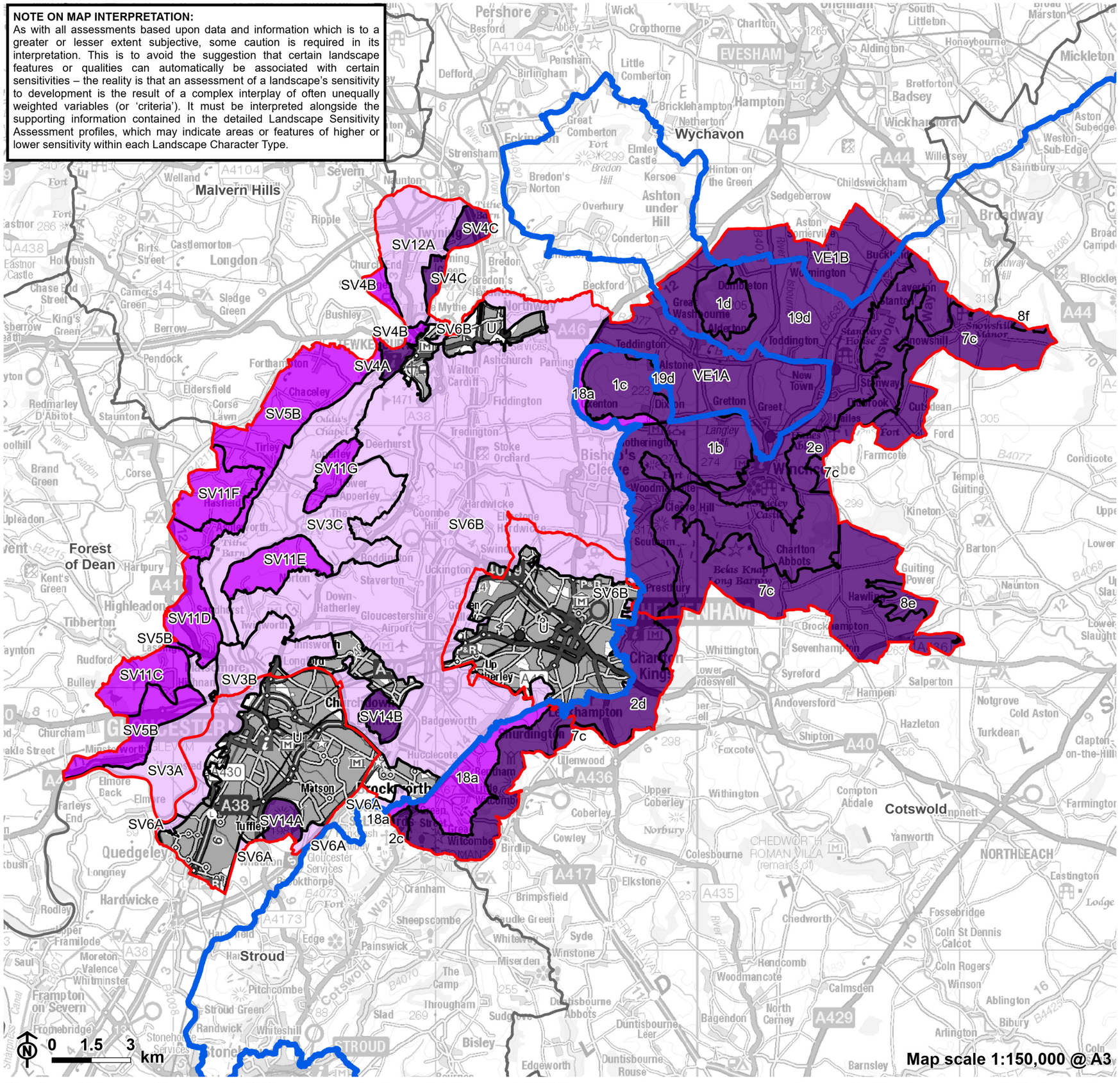
Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
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for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

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Figure 3.7 Landscape sensitivity to medium-scale wind energy development (60 to 100m tip height)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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NOTE ON MAP INTERPRETATION:
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for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

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Figure 3.8 Landscape sensitivity to large-scale wind energy development (100 to 150m tip height)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

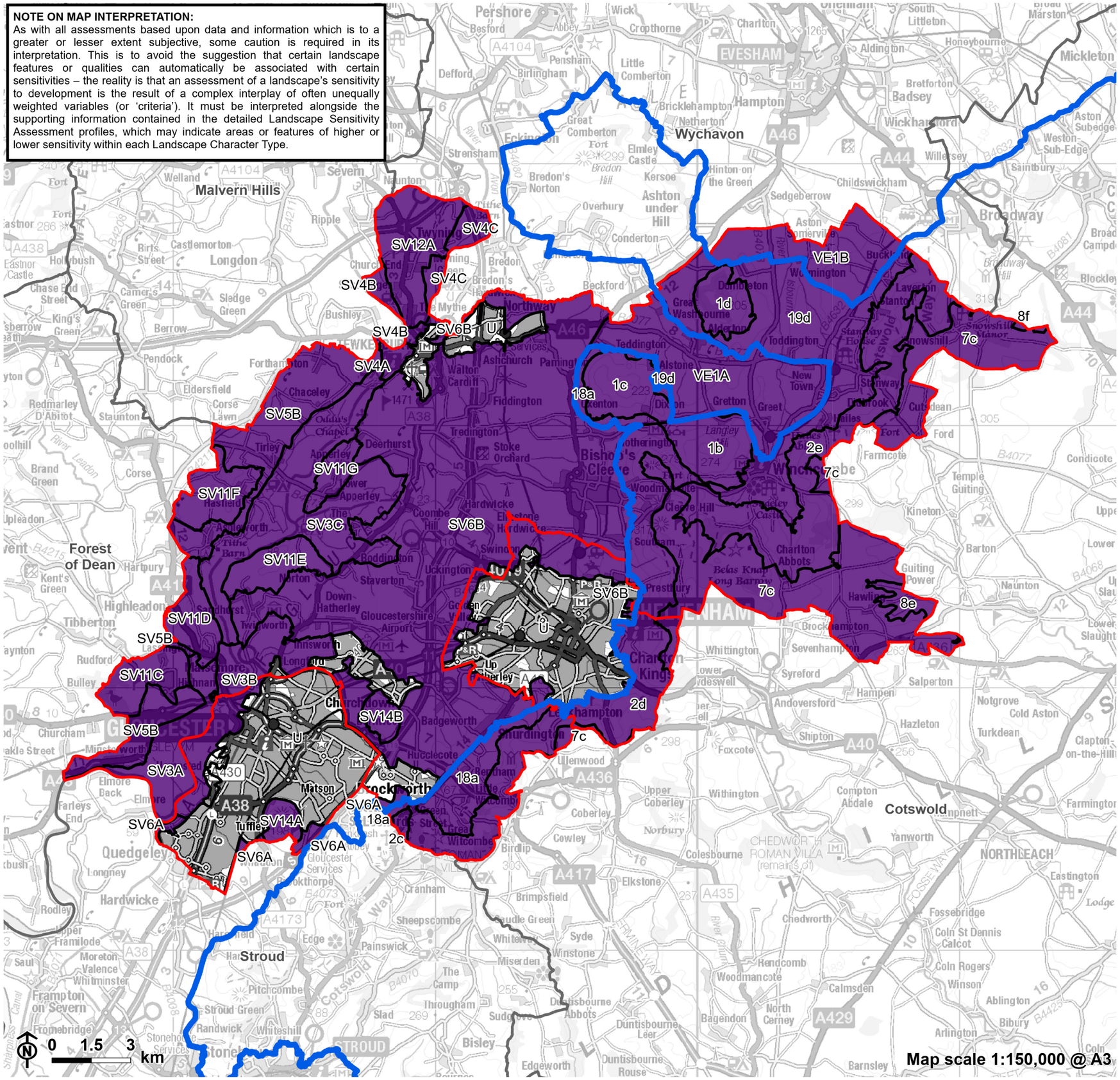
The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

0 1.5 3 km

Map scale 1:150,000 @ A3

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NOTE ON MAP INTERPRETATION:
As with all assessments based upon data and information which is to a greater or lesser extent subjective, some caution is required in its interpretation. This is to avoid the suggestion that certain landscape features or qualities can automatically be associated with certain sensitivities – the reality is that an assessment of a landscape's sensitivity to development is the result of a complex interplay of often unequally weighted variables (or 'criteria'). It must be interpreted alongside the supporting information contained in the detailed Landscape Sensitivity Assessment profiles, which may indicate areas or features of higher or lower sensitivity within each Landscape Character Type.



Renewable Energy Assessment
for Gloucester City Council, Cheltenham Borough Council and Tewkesbury Borough Council

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Figure 3.9 Landscape sensitivity to very large-scale wind energy development (150 to 220m tip height)

- Study area authority
- Neighbouring Local Authority
- Cotswolds AONB Boundary

Landscape sensitivity

- High
- Moderate-High
- Moderate
- Low-Moderate
- Low
- Landscape Character Type

Cotswolds AONB Landscape Character Assessment:

1 Escarpment Outliers
2 Escarpment
7 High Wold
8 High Wold Valley
18 Settled Unwooded Vale
19 Unwooded Vale

Gloucester Various Vales Landscape Character Assessment:

SV3 Floodplain Farmland
SV4 Riverside Meadows
SV6 Settled Unwooded Vale
SV11 Vale Hillocks
SV12 Low Hills and Commons
SV14 Escarpment Outlier
VE1 Unwooded Vale
U Urban

The labelled letters following the Landscape Character Type denote different Landscape Character Areas within each Landscape Character Type.

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Appendix A

User Guide

A.1 The following list should assist in using available information to shape proposals for renewable energy development and assist in assessing and appraising planning applications.

1. What type of change is proposed?

2. To which Landscape Character Type (LCT) does the proposal relate (refer to Figure 2.1) and is the site within a National Landscape? If a proposal is close to the edge of two or more LCTs, all relevant profiles will need to be consulted.

3. To what degree does the site reflect the typical sensitivities identified in the sensitivity criteria for the LCT in question? Which of these sensitivities will be affected by the proposal and how?

4. Does the assessment text identify any areas of higher or lower sensitivity at Landscape Character Area (LCA) level that may be applicable to the proposal?

5. Are there any specific site opportunities for mitigation?

Guidance on undertaking Landscape and Visual Impact Assessment

Overall need/purpose

A.2 A landscape and visual impact assessment (LVIA) is a key part of assessing the effect of proposed wind energy or solar PV developments, including as part of the EIA process. An EIA may not be required for all developments however it is likely that a landscape and visual impact assessment or appraisal (LVIA) will be required to accompany the planning application. The level of detail required will be dependent upon the sensitivity of the site and the nature of the proposal and its potential effects. Pre-application discussions with the relevant local planning authority are strongly recommended for all wind energy and solar PV applications. This will provide an opportunity to agree the scope, level of detail and presentation of the LVIA, and ensure that it is based on accurate and up-to-date information. The LVIA should address the key landscape issues raised by the proposals, providing information that is relevant, necessary and material to the decisions to be made. All renewable energy applications potentially affecting a National Landscape or National Park will automatically require an LVIA.

A.3 General guidance on LVIA is provided in the Landscape Institute and Institute of Environmental Management and Assessment's 'Guidelines for Landscape and Visual Impact Assessment'. However, the following guidance sets out the type of information that could be expected to be submitted as part of an LVIA for a solar PV or wind energy development. In addition, LVIAs for EIA developments should comply with the scoping opinion given by the planning authority where this has been sought.

A.4 The following section sets out the required components of an LVIA, in terms of information required to submit along with a planning application.

Project description

A.5 The planning application should include a description of the project at each phase in its life cycle in sufficient detail to allow the assessment of landscape and visual effects including:

- The location, layout, orientation and dimensions or extent of all plant and structures (including plans, elevations and sections);
- A description of the scale and duration of project activities during construction, operation, and decommissioning (including method of construction and traffic generation);
- Information on site access including routes for transport of renewables infrastructure, including any need for removal of landscape features;
- Location and size of temporary lay down areas, construction compounds, materials storage, temporary fencing, foundations and site cable runs;
- Excavation/levelling details and soil removal estimates (if applicable);
- Plans for site reinstatement;
- Details of any tracking or moving mechanisms;
- Location, specification and design of any structures, roads, hardstanding or storage buildings, temporary and permanent;
- Location and appearance of any signage, security features, lighting, fencing and onsite grid connection point (substation/switchgear cabinet);
- Plans for landscape mitigation measures and/or landscape enhancement; and
- Plans for decommissioning (removal of infrastructure and ancillary structures, proposals for restoration and future land management).

A.6 The LVIA should highlight those aspects of the development that are the key sources of landscape and visual change.

Baseline studies

A.7 The baseline studies should set out the existing conditions within the study area. The study area should be agreed with the planning authority. Information on land use, landscape features, landscape character and landscape designations should be provided, drawing on the Landscape Character Assessments and National Landscape Management Plans (where relevant to the site in question). A field survey should be undertaken to supplement desk based information.

A.8 The landscape baseline should be evaluated in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' (3rd Edition) – known as GLVIA 3.

A.9 A zone of theoretical visibility (ZTV) should be prepared to indicate the area over which the renewable energy development may be seen. ZTVs should be used, alongside fieldwork, to identify representative assessment viewpoints. These viewpoints should be discussed and agreed with the planning authority and other stakeholders. The number of viewpoints required will vary depending on the size of the development and sensitivity of the location. Priority should be given to views from distances of less than 3km and from sensitive locations (e.g. residential areas, areas popular with visitors or for outdoor recreation where views may be focussed on the landscape and recognised/iconic views). If the development is visible from a protected landscape there will be a requirement for at least one viewpoint from that landscape. The purpose for selection should be recorded within the LVIA.

Mitigation

A.10 As a consequence of the assessment process there are likely to be modifications to the scheme design to minimise landscape and visual effects, particularly for larger schemes. In addition, there may be measures to prevent, reduce or offset significant adverse effects. These should be described in terms

of relationship to/conservation of valued landscape features, relationship to landscape character (particularly topography, scale, landform and landscape pattern), and appearance from sensitive viewpoints and designated landscape. All mitigation measures should be described and an indication of how they will be implemented provided. A description of the main reasons for site selection and any alternatives in site design or layout would also be helpful. Please refer to the recently published GLVIA 3 for further guidance on mitigation.

Enhancement

A.11 Enhancement aims to improve the character and quality of the landscape. It may take many forms, including improved land management or creation of new landscapes or features. Landscape enhancement, as part of a proposal, will be looked upon favourably.

Description of effects

A.12 This section should systematically identify and describe the likely effects of the proposal, identifying magnitude of change as a deviation from baseline conditions. Methods should be clearly set out. The assessment should cover effects at construction, operational and decommissioning phases and should consider direct, indirect, secondary, short, medium and long term effects. Effects on landscape features/fabric, landscape character, landscape values and visual amenity should be assessed.

- Effects on landscape features/fabric should consider loss of elements (e.g. hedges, trees).
- Effects on landscape character should describe the direct changes that will occur to the character of the landscape in which the proposal is located and the indirect changes to character of landscapes from where the development will be visible – this should include how the renewable energy development will affect perceptions of character and how widespread and prominent the changes will be.

- Effects on landscape values should describe any potential changes in special qualities of landscapes as recorded in Landscape Character Assessments. Particular weight should be given to protecting the special qualities of protected landscapes, focussing on the reasons for designation referred to in their Management Plans.
- Effects on visual amenity should describe and illustrate the extent of visibility and record changes in views from the representative assessment viewpoints with reference to photographs and visualisations.
- Effects on settlements and individual properties should also be considered where relevant.

Assessment of significance

A.13 The significance of effects should be assessed by reference to GLVIA 3. The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial. Methods should be clearly set out and any assumptions clearly stated.

Presentation of the LVIA

A.14 The document should be clear and logical in its layout and presentation. It should be a balanced document providing an unbiased account of the landscape and visual effects, with reasoned and justifiable arguments. A glossary of technical terms and reference list would also be helpful. For EIA development, a non-technical summary should be provided to enable a non-specialist to understand the landscape and visual effects of the proposal – this should include a summary description of the development, the aspects of landscape character and visual amenity likely to be significantly affected, and the mitigation measures to be implemented.

Maps and illustrations to accompany an LVIA

A.15 The number of maps and illustrations may vary according to the sensitivity of the site and type of proposal. However, as a guide, the following illustrations will typically be required as part of an LVIA for EIA development (see next section for maps and figures required as part of a cumulative assessment):

- A site layout plan showing position of infrastructure, access arrangements, location of any compounds, and all ancillary elements for the development in the context of the physical landscape fabric (this may already form part of the planning application in which case it can be cross-referenced);
- National character areas within the study area;
- Landscape Character Areas/Types (distance dependent upon scale of development);
- National landscape designations and open access land within the study area;
- Local landscape designations closer to the site (distance dependent upon scale of development);
- Mapping of historic parks and gardens, conservation areas, scheduled monuments, listed buildings and heritage trails may also be relevant to the LVIA (this information may also be recorded in the cultural heritage assessment);
- Zone of Theoretical Visibility within study area or an indication of extent of visibility (including the proportion of the site which will be theoretically visible if possible, and clearly indicating distance radii from the site);
- A map showing viewpoint locations, overlaid onto the Zone of Theoretical Visibility (may be combined with above maps if relevant);
- Zone of Theoretical Visibility overlaid onto character areas and designations (likely to be more than one map); and
- Photographs and photomontages/visualisations for viewpoints to illustrate the location and extent of development in the landscape, provided and reproduced at a minimum viewing distance of 30-50cm.

Cumulative Landscape and Visual Impact Assessment (CLVIA)

Overall need/purpose

A.16 Cumulative assessment as part of Environmental Impact Assessment (EIA) is required under the EU Directive on EIA (Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment), which was implemented from 1999. It refers to 'an additional cumulative effect that is additional to the impact to be expected from the developments taken individually' (The Council of the European Union, 1997).

A.17 The Landscape Institute defines cumulative landscape and visual effects as 'additional changes to landscape and visual amenity caused by the proposed development in conjunction with other developments (associated with or separate to it) or actions that have occurred in the past, present or are likely to occur in the foreseeable future'. Cumulative effects can trigger the EIA process. Even if EIA is not required, it is likely that a cumulative landscape and visual impact assessment or appraisal (CLVIA) will be required to accompany the planning application.

Differences between LVIA and CLVIA

A.18 Although both cumulative and non-cumulative landscape and visual impact assessment (CLVIA and LVIA respectively) consider the effects of a renewable energy development on views and on the landscape character of the surrounding area, there are differences in the baseline against which the assessments are carried out.

A.19 For LVIA, the baseline is the existing landscape, which includes any existing solar PV or wind energy developments. This is a known baseline that can be clearly defined. For CLVIA, the baseline is to some extent uncertain, and is partially speculative. This is because renewable energy developments considered as part of the baseline should include not only those existing in the landscape, but also those which are consented but not yet built and also those in the process of being determined by the relevant planning authority. The baseline may therefore include (in addition to existing renewables developments):

- Renewables developments currently under construction;
- Renewables developments which have been granted planning permission but are not yet constructed; and
- Renewables developments that are the subject of a valid planning application that has not yet been determined.

A.20 Schemes that are at the pre-planning or scoping stage are not generally considered in the assessment. They should only be included "if absolutely necessary to make a realistic assessment of potential cumulative effects". In accordance with GLVIA 3 it may also be necessary to separately consider the total and additional cumulative effects of developments. The list of schemes to include and assessment scenarios should be agreed with the Council who will need to decide what is reasonable and proportionate to request for specific applications.

Information required to be submitted as part of a CLVIA

A.21 The level of detail required will be dependent upon the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential for cumulative effects. A pre-planning application meeting with the relevant LPA may provide an opportunity to discuss scope. The following presents some guidance on undertaking CLVIA of wind energy/solar PV developments.

Study Area and sites to be included

A.22 It is suggested that the CLVIA focuses on potentially significant cumulative effects and that a study area is selected to enable these significant effects to be reported. Study areas will depend on the size and location of other existing and proposed schemes within the landscape and will vary with type of landscape, but initial areas of search may be up to 10km from the proposal. All existing and proposed renewables developments should be mapped within that area. The assessment may then focus in on 'hotspot' areas to identify likely significant effects – these 'sub-areas' might be less than 10km from the development. This will help keep the assessment proportional to the scale of the project and the nature of its likely effects.

Cumulative ZTV Analysis

A.23 Creating Zones of Theoretical Visibility (ZTVs) for each development, and overlaying these to create a CZTV, could help indicate areas where the proposed development is predicted to be visible (either on its own, or in conjunction with other renewables developments), and areas where other renewables developments will be visible but the proposed development will not. This can help focus the assessment.

A.24 Applicants should assess the cumulative landscape and visual effects of different scenarios, if applicable. This may include, for example, a scenario that considers the proposed development in the context of other existing, under construction and consented renewables developments (a fairly certain scenario) as well as a scenario that considers the proposed development in the context of other existing, under construction and consented developments as well as undetermined applications (a less certain scenario).

Choice of viewpoints

A.25 A number of viewpoints should be selected to illustrate cumulative visual effects arising from the renewable energy development being assessed, in combination with other existing and proposed renewable energy developments. These selected viewpoints may be the same as, or a subset, of the main LVIA viewpoints, or they may be different. In any case they should be selected specifically to illustrate cumulative effects, including representing the worst-case. These should be agreed with the relevant LPA prior to submission of planning application and preferably at the scoping stage.

Baseline evaluation for the CLVIA

A.26 The sensitivity of the landscape and visual resource will be the same as that recorded in the LVIA. However, SNH guidance on CLVIA recommends that key routes should also form part of the cumulative assessment. If routes are included in the assessment their sensitivity will also need evaluating. Key routes should be selected with reference to guidance published by Scottish Natural Heritage (SNH, 2012) and should include well used or important routes (e.g. National and Regional Trails and well used tourist routes) that may be affected by cumulative effects.

Preparing cumulative visualisations

A.27 Cumulative visualisation set beneath photographs, and/or photomontages should be prepared from viewpoints to illustrate the nature and degree of cumulative change to the landscape and views. This is particularly important in cases where significant cumulative effects are predicted.

Describing and assessing effects

Magnitude of cumulative change to landscape

A.28 The magnitude of cumulative change to landscape character is the influence the additional renewables development will have on the character of the area which is informed by:

- The distance over which the development will have an influence on landscape character in combination with other renewables developments;
- The siting or location of the development being assessed in relation to other existing and proposed renewables developments (and their relationship to landscape character types);
- The design of the renewable energy development being assessed in relation to other existing and proposed renewable energy developments (including scale and layout of the development); and
- Whether key characteristics of the surrounding landscape are affected by the cumulative impact.

A.29 It will also be important to consider the combined effect of fencing, tracks, buildings and other ancillary features of the renewable energy developments on the landscape.

Magnitude of cumulative change to views

A.30 The magnitude of cumulative change to views should be described taking into account the following considerations:

- The arrangement of developments in the view, e.g. developments seen in one direction or part of the view, or seen in many directions;
- The visibility/prominence of the Proposed Development compared to the other existing and proposed schemes;

- The apparent distances, from the viewer, and between developments;
- The relationship between the various sizes and layouts of the developments;
- In the case of magnitude of change to routes (sequential effects), the relative duration of views of developments from routes;
- It will also be important to consider the combined effect of tracks on views; and
- The CLVIA may also consider cumulative effect on views from settlements through use of CZTVs and visits to the settlements.

Effect on designated landscapes

A.31 The CLVIA should set out the implications of cumulative effects on designated landscapes within the study area – for example the Cotswolds National Landscape (AONB).

Significance

A.32 The assessment should identify which effects are considered to be significant in the context of the EIA Regulations (for EIA development), as well as which are adverse or beneficial.

Figures

A.33 The number of maps and illustrations may vary according to the sensitivity of the site, the nature of the proposal and other existing and proposed schemes, and the potential for cumulative effects. However, as a guide the following illustrations will typically be required as part of a CLVIA for EIA development:

- Location map for all operational, consented and application sites within the study area, presented on a 1:50,000 or 1:25,000 OS base with concentric distance bands;
- CZTV for existing and proposed renewable energy developments in combination with the proposed development (CZTVs may be particularly useful for larger schemes – more than one CZTV may be useful to show different scenarios, as set out in the guidance above);
- CZTVs overlaid onto landscape character areas, landscape designations and cumulative assessment viewpoints as relevant; and
- Photographs or visualisations (comprising photomontages) of up to 360 degrees to show the proposed development in the context of other developments – annotated with site name, status (operational, permitted, application), and distance to each development, and clearly labelled to indicate how the images should be held and viewed.

Appendix B

Landscape Sensitivity Assessment Profiles

See separate document.

Report produced by LUC

Bristol
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Landscape Design/Strategic Planning & Assessment
Development Planning/Urban Design & Masterplanning
Environmental Impact Assessment/Landscape Planning & Assessment
Landscape Management/Ecology/Historic Environment/GIS & Visualisation

Report produced by LUC

References

1 Cotswolds Landscape Character Assessment (2017) https://www.cotswolds-nl.org.uk/our-landscape/landscape-character-assessment/

2 Gloucestershire Landscape Character Assessment, LDA Design (2006) https://www.gloucestershire.gov.uk/media/ad5fgwta/landscape-report-various-vales-text-pdf-172-mb.pdf

3 Cotswolds AONB Management Plan (2023) https://www.cotswolds-nl.org.uk/wp-content/uploads/2023/09/CNL_Management-Plan-2023-25_final.pdf

4 Cotswolds Conservation Board Climate Change Strategy (2022) https://www.cotswolds-nl.org.uk/wp-content/uploads/2022/03/CNL-Climate-Change-Strategy-Adopted-Feb-2022.pdf

5 Cotswolds Conservation Board Statement on Renewable Energy (2023) https://www.cotswolds-nl.org.uk/wp-content/uploads/2023/07/Renewable-Energy-June-2023.pdf